March 19, 2003

Re: Naval Surface Warfare Center - Crane 101-16761-00005

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency Administrator, Christine Todd Whitman 401 M Street Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure FNTVPMOD.wpd 8/21/02



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

March 19, 2003

James Hunsicker Naval Surface Warfare Center - Crane Division 300 Highway 361 Crane, Indiana 47522-5009

Re: 001-16761-00005

Second Minor Permit Modification to: Part 70 Permit No.: T001-7341-00005

Dear Mr. Hunsicker:

Naval Surface Warfare Center, Crane Division was issued a permit on May 15, 2001 for a military base. A letter requesting changes to this permit was received on October 31, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document. The following units are approved for operation:

(u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

All other conditions of the permit shall remain unchanged and in effect. The entire permit is enclosed.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Kristin Clapp, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (703) 633-1694 to speak directly to Ms. Clapp. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Singed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments

ERG/KC

cc: File - Martin County
U.S. EPA, Region V
Martin County Health Department
Air Compliance Section Inspector - Gene Kelso
Compliance Data Section - Karen Nowak
Administrative and Development - Sarah Cloe
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Naval Surface Warfare Center, Crane Division 300 Highway 361 Crane, Indiana 47522

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T101-7341-00005	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 15, 2001 Expiration Date: May 14, 2006

First Significant Source Modification: 101-14493-00005, Issued January 4, 2002 First Significant Permit Modification: 101-14789-00005, Issued January 22, 2002 Second Significant Source Modification: 101-14772-00005, Issued June 7, 2002 Second Significant Permit Modification: 101-14889-00005, Issued June 7, 2002 First Minor Source Modification: 101-15490-00005, Issued June 26, 2002

Third Significant Permit Modification: 101-15983-00005, Issued September 11, 2002

First Minor Permit Modification: 101-15582-00005, issued October 4, 2002

Second Minor Permit Modification: 101-16761-00005	Affected Pages: 20, 123-124, 135-136
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: March 19, 2003

Permit Reviewer: Kimberly Paurazas

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- D.22.11Operation and Maintenance [326 IAC 2-7-5(13)][40 CFR 63.1206(7)(i), Subpart EEE]
- D.22.12 Broken or Failed Bag Detection [40CFR 63, 1206(c) (7)(ii)(D)]

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- D.22.14 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart A]
- D.22.15 Monitoring [40 CFR 63.1209]
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Part 70 Quarterly Report - Paint Booths

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Part 70 Quarterly Report - Mobile Plasma Treatment System

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Quarterly Deviation and Compliance Monitoring Report

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Crane, Indiana

SECTION A

Permit Reviewer: Kimberly Paurazas

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information in Sections A.1 through A.4 and in all Facility Description boxes in the D Sections is descriptive information and does not constitute enforceable conditions; however, the Permittee should be aware that physical changes or changes in the method of operation that may render this descriptive information obsolete or inaccurate may also trigger requirements for permits or permit modifications under 326 IAC 2.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a military base where ammunition, rockets and other military ordnance are manufactured, stored and disposed.

Responsible Official: Captain T. Scott Wetter

Source Address: 300 Highway 361, Crane, Indiana 47522-5009

Mailing Address: Code 09510 Building 3260, 300 Highway 361, Crane, Indiana 47522

Contact Person: Mr. Shashi Kumar Phone Number: (812) 854-6156 SIC Code: 9711, 3483 County Location: Martin

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD Rules;

Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Eighteen (18) Abrasive Blasting Units:
 - (1) CRN-0104-03-23-HH16, located in Building 104, constructed in 1983, with a maximum capacity of 1000 lbs/yr (0.5 tons per year (TPY)) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-0104-03-23-HH16-S.
 - (2) CRN-0106-02-23-HH13, located in Building 106, constructed in 1988, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0106-02-23-HH13-S1, S2.
 - (3) CRN-0107-05-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY)abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-05-23-HH13-S.
 - (4) CRN-0107-06-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-06-23-HH13-S.
 - (5) CRN-0107-07-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-07-23-HH13-S.

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- (6) CRN-2171-01-17-DD22, located in Building 2171, constructed in 1970, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-2171-01-17-DD22-S.
- (7) CRN-2521-07-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-07-02-J17-S.
- (8) CRN-2521-08-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emission, and exhausting to stack CRN-2521-08-02-J17-S.
- (9) CRN-2521-09-2-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-09-2-J17-S.
- (10) CRN-2930-06-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY)abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.
- (11) CRN-2930-07-17-V25, located in Building 2930, constructed in 1993,with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.
- (12) CRN-2930-08-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.
- (13) CRN-3234-14-17-U26, located in Building 3234, constructed in 1993, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3234-14-17-U26-S.
- (14) CRN-0107-08-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.4 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-08-23-HH13-S.
- (15) Pangborn Rotoblaster CRN-0155-06-17-BB25, located in Building 155, constructed in 1972, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0155-06-17-BB25-S.
- (16) CRN-0227-03-23-HH12, located in Building 227, constructed before 1991, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using baghouse to control particulate matter emissions, and exhausting to stack CRN-0227-03-23-HH12-S.

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- (17) CRN-3168-03-17-V28, located in Building 3168, constructed in 1988, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3168-03-17-V28-S.
- (18) CRN-0107-09-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.35 TPY) abrasive used, using a baghouse to control emissions, and exhausting to stack CRN-0107-08-23-HH13.
- (b) Thirty-three (33) boilers:
 - (1) Cleaver Brooks natural gas-fired boiler, identified as CRN-0115-01-23-GG12, located in Building 115, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0115-01-23-GG12-S.
 - (2) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0115-03-23-GG12, located in Building 115, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0115-03-23-GG12-S.
 - (3) Cleaver Brooks natural gas-fired boiler, identified as CRN-0128-01-17-W25, located in Building 128, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0128-01-17-W25-S.
 - (4) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0128-03-17-W25, located in Building 128, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0128-03-17-W25-S.
 - (5) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0140-01-17-Y25, located in Building 140, constructed in 1982, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0140-01-17-Y25-S.
 - (6) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0140-02-17-Y25, located in Building 140, constructed in 1982, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0140-02-17-Y25-S.
 - (7) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-01-17-CC23, located in Building 150, constructed in 1989, with a maximum capacity of 25.2 mmBtu/hr, and exhausting to stack CRN-0150-01-17-CC23-S.
 - (8) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-02-17-CC23, located in Building 150, constructed in 1972, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0150-02-17-CC23-S.
 - (9) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-03-17-CC23, located in Building 150, constructed in 1989, with a maximum capacity of 25.2 mmBtu/hr, and exhausting to stack CRN-0150-03-17-CC23-S.
 - (10) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0199-01-23-JJ14, located in Building 199, constructed in 1978, with a

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maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0199-01-23-JJ14-S.

- (11) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0199-02-23-JJ14, located in Building 199, constructed in 1978, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0199-02-23-JJ14-S.
- (12) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-1819-01-17-Y23, located in Building 1819, constructed in 1981, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-1819-01-17-Y23-S.
- (13) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-1819-02-17-Y23, located in Building 1819, constructed in 1981, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-1819-02-17-Y23-S.
- (14) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2087-01-10-S30, located in Building 2087, constructed in 1978, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-2087-01-10-S30-S.
- (15) Iron Fireman natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2692-01-17-W27, located in Building 2692, constructed in 1983, with a maximum capacity of 3.01 mmBtu/hr, and exhausting to stack CRN-2692-01-17-W27-S.
- (16) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-01-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-01-12-M41-S.
- (17) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-02-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-02-12-M41-S.
- (18) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-03-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-03-12-M41-S.
- (19) Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-3234-02-17-U26, located in Building 3234, constructed in 1992, with a maximum capacity of 8.234 mmBtu/hr, and exhausting to stack CRN-3234-02-17-U26-S.
- (20) Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-3234-03-17-U26, located in Building 3234, constructed in 1992, with a maximum capacity of 8.234 mmBtu/hr, and exhausting to stack CRN-3234-03-17-U26-S.
- (21) Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0041-01-17-U26, located in Building 41, constructed in 1977, with a maximum capacity of 10.0 mmBtu/hr, and exhausting to stack CRN-0041-01-17-U26-S.
- Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0041-02-17-U26, located in Building 41, constructed in 1983, with a maximum capacity of 6.9 mmBtu/hr, and exhausting to stack CRN-0041-02-17-U26-S.

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- (23) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0064-01-10-T27, located in Building 64, constructed in 1976, with a maximum capacity of 10.0 mmBtu/hr, and exhausting to stack CRN-0064-01-10-T27-S.
- (24) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0115-02-23-GG12, located in Building 115, constructed in 1985, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0115-02-23-GG12-S.
- (25) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0128-02-17-W25, located in Building 128, constructed in 1984, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0128-02-17-W25-S.
- (26) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0149-01-10-S30, located in Building 149, constructed in 1980, with a maximum capacity of 6.7 mmBtu/hr, and exhausting to stack CRN-0149-01-10-S30-S.
- (27) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0149-02-10-S30, located in Building 149, constructed in 1980, with a maximum capacity of 6.7 mmBtu/hr, and exhausting to stack CRN-0149-02-10-S30-S.
- (28) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0180-01-17-W22, located in Building 180, constructed in 1999, with a maximum capacity of 4.2 mmBtu/hr, and exhausting to stack CRN-0180-01-17-W22-S.
- (29) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0180-02-17-W22, located in Building 180, constructed in 1999, with a maximum capacity of 4.2 mmBtu/hr, and exhausting to stack CRN-0180-02-17-W22-S.
- (30) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2517-01-10-T21, located in Building 2517, constructed in 1981, with a maximum capacity of 4.85 mmBtu/hr, and exhausting to stack CRN-2517-01-10-T21-S.
- (31) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2517-02-10-T21, located in Building 2517, constructed in 1981, with a maximum capacity of 4.85 mmBtu/hr, and exhausting to stack CRN-2517-02-10-T21-S.
- Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2523-01-9-K18, located in Building 2523, constructed in 1983, with a maximum capacity of 17.38 mmBtu/hr, and exhausting to stack CRN-2523-01-9-K18-S.
- (33) Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2523-02-9-K18, located in Building 2523, constructed in 1983, with a maximum capacity of 17.4 mmBtu/hr, and exhausting to stack CRN-2523-02-9-K18-S.
- (c) Three (3) Carpentry Shops, identified as:
 - (1) CRN-0056-04-10-T21, located in Building 56, using a wood usage of 74,880 board feet per year, with a process weight rate of 0.14 tons per hour, equipped

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with a cyclone for particulate control, and exhausting to stack CRN-0056-04-10-T21-S.

- (2) CRN-0224-02-23-HH12, located in Building 224, using a wood usage of 1,000,000 board feet per year, with a process weight rate of 0.69 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-0224-02-23-HH12-S.
- (3) CRN-2720-04-23-GG12, located in Building 2720, using a wood usage of 14,000 board feet per year, with a process weight rate of 0.25 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-2720-04-23-GG12-S.
- (d) Thirty-two (32) paint booths:
 - (1) CRN-0102-01-23-FF14, located in Building 102, constructed in 1993, using a dry filter to control particulate matter emissions.
 - (2) CRN-0104-01-23-HH16, located in Building 104, constructed in 1983, using a water wall to control particulate matter emissions.
 - (3) CRN-0104-02-23-HH16, located in Building 104, constructed in 1983, using a water wall to control particulate matter emissions.
 - (4) CRN-0106-01-23-HH13, located in Building 106, constructed in 1960, using a water wall to control particulate matter emissions.
 - (5) CRN-0107-01-23-HH13, located in Building 107, constructed in 1980, using a dry filter to control particulate matter emissions.
 - (6) CRN-0107-02-23-HH13, located in Building 107, constructed in 1980, using a water wall to control particulate matter emissions.
 - (7) CRN-0107-03-23-HH13, located in Building 107, constructed in 1980, using a dry filter to control particulate matter emissions.
 - (8) CRN-0107-04-23-HH13, located in Building 107, constructed in 1980, using a wet wall to control particulate matter emissions.
 - (9) CRN-0136-01-17-Z26, located in Building 136, constructed in 1963, using a dry filter to control particulate matter emissions.
 - (10) CRN-0155-01-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (11) CRN-0155-02-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (12) CRN-0155-03-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (13) CRN-0155-04-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (14) CRN-0169-01-24-EE22, located in Building 169, constructed in 1950, using a dry filter to control particulate matter emissions.

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- (15) CRN-2520-01-17-Y26, located in Building 2520, constructed in 1968, using a water wall to control particulate matter emissions.
- (16) Bomb Finishing Line, with a maximum capacity of thirteen (13) units per hour and Projectile Renovation Operations with a maximum capacity of 120 units per hour, consisting of the following units:
 - (i) CRN-2728-01-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.
 - (ii) CRN-2728-02-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.
 - (iii) CRN-2728-03-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.
- (17) CRN-3234-09-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.
- (18) CRN-3234-10-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.
- (19) CRN-3234-15-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.
- (20) CRN-0101-01-23-FF13, located in Building 101, constructed in 1945, using a dry filter to control particulate matter emissions.
- (21) CRN-0109-01-23-GG14, located in Building 109, constructed in 1981, using a dry filter to control particulate matter emissions.
- (22) CRN-0174-01-24-FF21, located in Building 174, constructed in 1986, using a dry filter to control particulate matter emissions.
- (23) CRN-0198-01-23-II15, located in Building 198, constructed in 1980, using a dry filter to control particulate matter emissions.
- (24) CRN-0227-01-23-HH12, located in Building 227, constructed prior to 1991, using a dry filter to control particulate matter emissions.
- (25) CRN-0227-02-23-HH12, located in Building 227, constructed prior to 1991, using a dry filter to control particulate matter emissions.
- (26) CRN-2074-03-16-DD13, located in Building 2074, constructed in 1987, using a dry filter to control particulate matter emissions.
- (27) CRN-2517-05-10-T21, located in Building 2517, constructed in 1969, using a dry filter to control particulate matter emissions.
- (28) CRN-2697-01-17-W24, located in Building 2697, constructed in 1983, using a dry filter to control particulate matter emissions.
- (29) CRN-2713-01-17-X23, located in Building 2713, constructed in 1979, using a dry filter to control particulate matter emissions.

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- (30) CRN-2805-01-23-GG19, located in Building 2805, constructed in 1969, using a dry filter to control particulate matter emissions.
- (31) CRN-2805-02-23-GG19, located in Building 2805, constructed in 1995, using a dry filter to control particulate matter emissions.
- (32) CRN-3168-02-17-V28, located in Building 3168, constructed in 1988, using a dry filter to control particulate matter emissions.
- (e) One (1) Asphaltic Coating Operation, identified as CRN-0155-05-17-BB25, located in Building 155, with a maximum usage of 3.64 tons per hour, using an electrostatic precipitator for PM control, and exhausting to stack CRN-0155-05-17-BB25-S.
- (f) Open Burning/Open Detonation:
 - (1) Open Burning of Ordnance at the Ammunition Burning Ground, identified as CRN-ABG-01-19-DD43, with a maximum usage of 2.3 mmlb/yr (1150 tons/yr) of Dunnage; 0.64 mmlb/yr (320 tons/yr) of Explosive; 4.7 mmlb/yr (2350 tons/yr) of Propellant.
 - Open Detonation of Ordnance at the Demolition Range, identified as CRN-DR-01-24-KK21, with a maximum usage of 0.13 mmlb/yr (65 tons/yr) of Dunnage; 1.6 mmlb/yr (800 tons/yr) of Explosive; 0.52 mmlb/yr (260 tons/yr) of Propellant.
 - Open Burning of Ordnance at the Old Rifle Range, identified as CRN-ORR-01-24-JJ24, with a maximum usage of 0.15 mmlb/yr (75 tons/yr) of Dunnage; 0.032 mmlb/yr (16 tons/yr) of Explosive; 0.012 mmlb/yr (6 tons/yr) of Propellant.
 - (4) Fast and Slow Cookoff at the Ordnance Test Area, identified as CRN-OTA-01-29-WW18, with a maximum usage of 10,000 units of various ordnance per year.
- (g) One (1) Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, located in Building 3234, equipped with a packed-bed scrubber, and exhausting to stack CRN-3234-13-17-U26-S.
- (h) One (1) Stripping Tank (open-top vapor degreaser), constructed in 1992, identified as CRN-3234-12-17-U26, located in Building 3234, and exhausting to stack CRN-3234-12-17-U26-S.
- (i) One (1) Vapor Degreaser, identified as CRN-0106-03-23-HH13, located in Building 106, with a maximum Natural Orange usage of 0.5 gallons per day, equipped with cooling/condensing coils and a cover to control VOC emissions, and exhausting to stack CRN-0106-03-23-HH13-S.
- (j) Mixing and pouring equipment in Building 200 used as a plastic bonded explosive line, constructed in 1984, consisting of mixing and pouring operations, using a carbon adsorption system with a wet scrubber to control particulate matter emissions.
- (k) Explosive Bomb Loading Operation, constructed in 1987, consisting of:
 - (1) screening and weighing aluminum powder in Building 2714, using a baghouse for particulate control; and
 - (2) screening and weighing TNT in Building 153, using a wet scrubber for particulate control; and

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(3) melting and mixing aluminum powder and TNT in Building 152, using a wet scrubber for particulate control.

- (I) One natural gas-fired rotary kiln furnace in Building 69, used for white phosphorous conversion to phosphoric acid, constructed in 1983 and using a variable throat venturi scrubber to control particulate matter emissions.
- (m) Service Station (Gasoline/Diesel Dispensing), identified as CRN-3280-04-17-X23, located in Building 3280, with a maximum usage of 350,000 gallons of unleaded gasoline per year, and 350,000 gallons of diesel per year.
 - (1) Two (2) Above ground vertical fixed-roof cone tanks, storing unleaded gasoline, constructed in 1995, identified as:
 - (A) CRN-3280-01-17-X23, located in Building 3280, with a maximum capacity of 11,600 gallons (43.9 m³), and equipped with a vapor recovery system of 99.9+% removal efficiency;
 - (B) CRN-3280-02-17-X23, located in Building 3280, with a maximum capacity of 11,600 gallons (43.9 m³), and equipped with a vapor recovery system of 99.9+% removal efficiency.
- (n) Testing of Fuses, Boosters, and other Explosive Devices
 - (1) One (1) containment chamber in Building 2167, constructed in 1986, used to test burn pyrotechnic items.
 - (2) One (1) test cell in Building 3235, constructed in 1991, used to test lithium batteries, using a vertical packed-bed tower to control particulate matter emissions.
 - (3) One (1) containment chamber in Building 142, constructed in 1995, used to test detonation of fuses, boosters and other explosive devices, using a baghouse to control particulate matter emissions.
- (o) Eighteen (18) autoclaves and one (1) belt flaker located in in Building 160, used for the demilitarization of 750 pound bombs, with a combined maximum capacity of 2,000 lbs/hr, using six (6) wet scrubbers to control particulate matter emissions.
- (p) One (1) C-4 extruder process line, located in Building 2172, with a maximum manufacturing capacity of forty (40) 1.2 pound C-4 blocks per minute.
- (q) One (1) contained detonation chamber, identified as P01, located in Building 3339, with a maximum capacity of 7500 pounds per hour gross weight of munitions, 750 pounds per hour net explosive weight (NEW), equipped with one (1) baghouse for particulate control, and exhausting to stack S01.
- (r) One (1) mobile plasma treatment system (MPTS), identified as P02, located near Building 69, with a maximum capacity of 3600 pounds per hour gross weight of explosives, 500 pounds per hour net explosive weight (NEW), equipped with one (1) afterburner for VOC and CO control, one (1) semi-dry scrubber for HCl and PM control, and one (1) Selective Catalytic Reduction (SCR) unit for NO_x control and exhausting at stack S02. The semi-dry scrubber is composed of an evaporative cooler, sodium bicarbonate injection, and a pulse-jet baghouse.

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- (s) One (1) diesel-fueled 4160-volt, 1000 kW generator which powers the MPTS exhausting at stack S03.
- (t) One (1) flare manufacturing process located in Buildings 2504 and 145, with a maximum manufacturing capacity of 180 pounds of magnesium teflon viton (MTV) compound per day.
- (u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

- (a) This stationary source also includes the following insignificant activities:
 - (1) Natural gas-fired combustion sources with heat input less than ten million (10,000,000) Btu per hour, identified as:
 - (A) Natural gas-fired boilers, existing and in operation before September 21, 1983, located in the following buildings:
 - (i) boiler in each of the following buildings: 1, 2, 4, 12, 14, 17, 18, 38, 45, 181, 224, 300, 479, 1817, 1909, 2037, 2038, 2044, 2059, 2074, 2088, 2167, 2506, 2516, 2682, 2693, 2701, 2720, 2721, 2748, 2749, 2889, 2931, 2964, 2987, 2993, 3006
 - (ii) boilers in each of the following buildings: 7, 2521
 - (B) Natural gas-fired boilers, constructed after September 21, 1983, located in the following buildings:
 - (i) one boiler in each of the following buildings: 5, 8, 10, 34, 36, 37, 40, 47, 66, 77, 105, 128, 363, 365, 366, 966, 1141, 1149, 2036, 2041, 2045, 2694, 2807, 2921, 3109, 3149, 3168, 3173, 3188, 3234, 3235, 3239, 3243, 3250
 - (ii) two boilers in each of the following buildings: 39, 180, 364, 2035, 2674, 2906
 - (iii) four boilers in each of the following buildings: 3241, 3251
 - (2) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input less than six million (6,000,000) Btu per hour.
 - (3) Fuel oil-fired combustion sources with heat input less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
 - (A) 1.63 mmBtu fuel oil-fired boiler, constructed in July 1983, located in Building 74.
 - (B) 0.275 mmBtu/hr fuel oil-fired boiler, constructed in September 1990, located in Building 2918.

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- (C) Two (2) 1.3 mmBtu/hr natural gas/fuel oil-fired boilers, identified as Cleaver Brooks CRN-0180-01-17-W22 and CRN-0180-02-17-W22, constructed in 1999, located in Building 180.
- (4) Equipment powered by internal combustion engines of less than 500,000 Btu/hour capacity, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- (5) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage tank of less than 10,500 gallon capacity.
- (6) A petroleum fuel, other than gasoline, dispensing facility, having a storage tank of less than 10,500 gallon capacity, and dispensing less than 230,000 gallons per month.
- (7) Storage tanks less than one thousand (1,000) gallons in capacity with annual throughputs less than twelve thousand (12,000) gallons.
- (8) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (9) Machining where an aqueous cutting coolant continuously floods the machine interface.
- (10) Solvent recycling systems with less than 100 gallon batch capacity.
- (11) Activities associated with the treatment of wastewater streams with an oil and grease content less than 1% by volume.
- (12) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on site sewage treatment facility.
- (13) Natural draft cooling towers circulating less than or equal to 340,000 gallons per day.
- (14) Quenching operations used with heat treating processes.
- (15) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (16) Paved and unpaved roads and parking lots with public access.
- (17) Asbestos abatement projects regulated by 326 IAC 14-10.
- (18) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks and fluid handling equipment.
- (19) Blowdown for any of the following: sight glass, boiler, compressors, pumps and cooling tower.
- (20) On-site fire and emergency response training approved by the department.
- (21) Gasoline generators not exceeding 110 hp.

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- (22) Diesel generators not exceeding 1800 hp.
- (23) Natural gas turbines not exceeding 16,000 hp.
- (24) Stationary fire pumps.
- (25) Filter or coalescer media changeout.
- (26) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (27) Activities with emissions equal to or less than thresholds:

Lead(Pb=0.6 ton/year or 3.29 lbs/day
Carbon Monoxide(CO)=25 lbs/day
Sulfur Dioxide(SO2)=5 lbs/hour or 25 lbs/day
Particulate matter(PM)=5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NOx)=5 lbs/hour or 25 lbs/day
Volatile Organic Compounds (VOC)=3 lbs/hour or 15 lbs/day

- (1) Alphos tank, located in Building 2521.
- (2) Brown oxide line, located in Building 38
- (3) Bubble tester. Located in Building 2931
- (4) Coating, phosphorous, located in Building 1884
- (5) Curing room, located in Building 3148
- (6) Four (4) Detonations Cells, located in Building 142
- (7) Electrical discharge, located in Building 198
- (8) Environmental chamber, located in Building 2167
- (9) Explosives chamber, located in Building 142
- (10) Explosives removal (Steam-out and Autoclave), located in Building 160
- (11) Explosives mixing, located in Building 200
- (12) Explosives molding, located in Building 126
- (13) Heating oil bath, located in Building 39
- (14) Two (2) hood, fumes, located in 2940
- (15) Hood, vent, located in Building 38
- (16) Hood, vent, located in Building 174
- (17) Hood, vent, located in Building 226
- (18) One (1) incinerator used for the destruction of classified materials, located in Building 45
- (19) Infrared dry, located in Building 2036
- (20) Three (3) injection molders, located in Building 198
- (21) IR Heater, located in Building 38
- (22) Mold release unit, located in 226
- (23) Oven, located in Building 2940
- (24) Curing oven, located in Building 226
- (25) Three (3) drying ovens, located in Building 3234
- (26) Laboratory oven, located in Building 109
- (27) Paint booth, located in Building 2044
- (28) Fugitive emissions from painting
- (29) Passivation process
- (30) PDL Foam, located in Building 2698
- (31) Plating lines A, B, and C, located in Building 3234
- (32) Quench tank, located in Building 125
- (33) Rust inhibitor, located in Building 1884
- (34) Solvent hand wiping, located in Building 155
- (35) Solvent System, located in Building 226
- (36) Miscellaneous solvent usage in Building 2728

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- (37) Nineteen (19) above ground storage tanks
- (38) Seventy (70) underground storage tanks
- (39) One (1) fuel storage tank, located at Building 2760
- (40) Paint stripper, resistant, located in Building 38
- (41) Tank, brighteners, located at Building 1884
- (42) Vapor carbon fluid, located in Building 125
- (43) Washer, roller, located in Building 18
- (44) Washout unit, located in Building 18
- (45) Six (6) Underground Storage Tanks, identified as:
 - (1) CRN-0003-02-17-U21
 - (2) CRN-2737-06-12-M41
 - (3) CRN-2737-07-12-M41
 - (4) CRN-2984-02-17-W22
 - (5) CRN-2984-03-17-W22
 - (6) CRN-3149-02-16-DD12
- (46) Seventeen (17) Air Compressors:
 - (1) Worthington, located in Building 1820, with a maximum capacity of 365 acfm;
 - (2) Worthington, located in Building 1820, with a maximum capacity of 365 acfm;
 - (3) Davey, located in the Car Shop, with a maximum capacity of 365 acfm:
 - (4) Davey, located in Building 1820, with a maximum capacity of 365 acfm:
 - (5) Davey, located in Building 1820, with a maximum capacity of 365 acfm;
 - (6) Ingersoll, located in Building 1820, with a maximum capacity of 600 acfm;
 - (7) Davey, located in Building 1820, with a maximum capacity of 365 acfm;
 - (8) Ingersoll, located in Building 1820, with a maximum capacity of 250 acfm;
 - (9) Davey, located in Building 1820, with a maximum capacity of 125 acfm;
 - (10) Sullair, located in Building 160, with a maximum capacity of 600 acfm:
 - (11) Sullair, located in Building 198, with a maximum capacity of 600acfm;
 - (12) Sullair, located in Building 105, with a maximum capacity of 750 acfm:
 - (13) Davey, located in Building 2391, with a maximum capacity of 125 acfm;
 - (14) Davey, located in Building 2394, with a maximum capacity of 125 acfm:
 - (15) Ingersoll, located at Sullivan Lake, with a maximum capacity of 375 acfm;
 - (16) Ingersoll, located in Building 224, with a maximum capacity of 750 acfm; and
 - (17) Ingersoll, located in Building 200, with a maximum capacity of 750 acfm.
- (47) One (1) Krypton Leak Test Unit, constructed in 1990, identified as CRN-2931-05-17-V25, with a maximum capacity of 1.0 ci/year, and exhausting to stack CRN-2931-05-17-V25.

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- (48) One (1) fuel cell power plant utilizing a fuel processor to extract hydrogen from natural gas to produce a maximum of 212 kW of net, continuous 480 volt, 3-phrase, ac electric power from natural gas.
- (49) One (1) Dispo Spray Booth, Model L130, with a maximum capacity of nine (9) twelve (12) ounce paint cans per month, with no overspray and used for repairing small microwave warfare components consisting of aluminum and glass.
- one (1) closed loop conversion process, used to convert ammonium picrate to picric acid with a maximum production capacity of 7 tons of picric acid per day, and exhausting to stacks S2 and V1.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION B

Crane, Indiana

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source=s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)] B.6

This permit does not convey any property rights of any sort or any exclusive privilege.

Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC B.7 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

- The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information (b) that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source=s compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document

is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions: and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not

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require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Southwest Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

IDEM, OAQ:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

Southwest Regional Office (SWRO): Telephone Number: 812-436-2570 Facsimile Number: 812-436-2572

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

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The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable

requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
 - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).
 - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
 - (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
 - (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4.

Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the sources failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "A responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]
 - (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.
- B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
 - (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- B.21 Source Modification Requirement [326 IAC 2-7-10.5]

 A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.
- B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute (a) averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

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C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 - The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The
 requirement that the inspector be accredited is federally enforceable.

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Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to: Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later (c) than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] C.11

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

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Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (?2%) of full scale reading.
 - (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ("2%) of full scale reading.
 - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on June 25, 2001. Updated ERPs were submitted December 19, 2001.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

- C.17 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (1) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (2) Failure to take reasonable response steps shall constitute a violation of the permit.

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- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.
- C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
 permit, the Permittee shall take appropriate response actions. The Permittee shall
 submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
 receipt of the test results. The Permittee shall take appropriate action to minimize
 excess emissions from the affected facility while the response actions are being
 implemented.
 - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
 - (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

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Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
 - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
 - (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Naval Surface Warfare Center - Crane Division

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Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) Eighteen (18) Abrasive Blasting Units:
 - (1) CRN-0104-03-23-HH16, located in Building 104, constructed in 1983, with a maximum capacity of 1000 lbs/yr (0.5 tons per year (TPY)) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-0104-03-23-HH16-S.
 - (2) CRN-0106-02-23-HH13, located in Building 106, constructed in 1988, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0106-02-23-HH13-S1, S2.
 - (3) CRN-0107-05-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY)abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-05-23-HH13-S.
 - (4) CRN-0107-06-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-06-23-HH13-S.
 - (5) CRN-0107-07-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-07-23-HH13-S.
 - (6) CRN-2171-01-17-DD22, located in Building 2171, constructed in 1970, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-2171-01-17-DD22-S.
 - (7) CRN-2521-07-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-07-02-J17-S.
 - (8) CRN-2521-08-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emission, and exhausting to stack CRN-2521-08-02-J17-S.
 - (9) CRN-2521-09-2-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-09-2-J17-S.
 - (10) CRN-2930-06-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY)abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

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FACILITY OPERATION CONDITIONS (Continued)

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Facility Description [326 IAC 2-7-5(15)]

- (11) CRN-2930-07-17-V25, located in Building 2930, constructed in 1993,with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.
- (12) CRN-2930-08-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.
- (13) CRN-3234-14-17-U26, located in Building 3234, constructed in 1993, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3234-14-17-U26-S.
- (14) CRN-0107-08-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.4 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-08-23-HH13-S.
- (15) Pangborn Rotoblaster CRN-0155-06-17-BB25, located in Building 155, constructed in 1972, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0155-06-17-BB25-S.
- (16) CRN-0227-03-23-HH12, located in Building 227, constructed before 1991, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using baghouse to control particulate matter emissions, and exhausting to stack CRN-0227-03-23-HH12-S.
- (17) CRN-3168-03-17-V28, located in Building 3168, constructed in 1988, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3168-03-17-V28-S.
- (18) CRN-0107-09-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.35 TPY) abrasive used, using a baghouse to control emissions, and exhausting to stack CRN-0107-08-23-HH13.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from following abrasive blasting units:

- (1) CRN-0104-03-23-HH16, located in Building 104;
- (2) CRN-0106-02-23-HH13, located in Building 106;
- (3) CRN-0107-05-23-HH13, located in Building 107;

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- (4) CRN-0107-06-23-HH13, located in Building 107;
- (5) CRN-0107-07-23-HH13, located in Building 107;
- (6) CRN-2171-01-17-DD22, located in Building 2171;
- (7) CRN-2521-07-02-J17, located in Building 2521;
- (8) CRN-2521-07-02-J17, located in Building 2521;
- (9) CRN-2521-09-02-J17, located in Building 2521;
- (10) CRN-2930-06-17-V25, located in Building 2930;
- (11) CRN-2930-07-17-V25, located in Building 2930;
- (12) CRN-2930-08-17-V25, located in Building 2930;
- (13) CRN-3234-14-17-U26, located in Building 3234;
- (14) CRN-0107-08-23-HH13, located in Building 107;
- (15) Panghorn Rotoblaster CRN-0155-06-17-BB25, located in Building 155;
- (16) CRN-0227-03-23-HH12, located in Building 227, located in Building 155;
- (17) CRN-3168-03-17-V28, located in Building 3168;
- (18) CRN-0107-09-23-HH13, located in Building 107,

shall not exceed 0.551 pounds per hour when operating at a process weight rate less than 100 pounds per hour.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.3 Particulate Matter (PM)

The filter systems and baghouses for PM control shall be in operation at all times the abrasive blasting operations are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Visible Emissions Notations

- (a) Visible emission notations of the filter systems and baghouse stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the abrasive blasting units, at least once per shift when the abrasive blasting units are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 .0 and 6.0 inches of water or a range

established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the abrasive blasting operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced or repaired.

D.1.7 Filter Systems Inspections

An inspection shall be performed each calendar quarter of all filter systems controlling the abrasive blasting operations. All defective units shall be replaced or repaired.

D.1.8 Broken Bag or Filter System Failure Detection

In the event that bag or filter system failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of once per shift visible emission notations of the filter systems and baghouses stack exhaust.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and

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- (B) Cleaning cycle operation.
- (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.6 and D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6 and D.1.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (b) Thirty-three (33) boilers:
 - (1) Cleaver Brooks natural gas-fired boiler, identified as CRN-0115-01-23-GG12, located in Building 115, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0115-01-23-GG12-S.
 - (2) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0115-03-23-GG12, located in Building 115, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0115-03-23-GG12-S.
 - (3) Cleaver Brooks natural gas-fired boiler, identified as CRN-0128-01-17-W25, located in Building 128, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0128-01-17-W25-S.
 - (4) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0128-03-17-W25, located in Building 128, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0128-03-17-W25-S.
 - (5) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0140-01-17-Y25, located in Building 140, constructed in 1982, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0140-01-17-Y25-S.
 - (6) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0140-02-17-Y25, located in Building 140, constructed in 1982, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0140-02-17-Y25-S.
 - (7) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-01-17-CC23, located in Building 150, constructed in 1989, with a maximum capacity of 25.2 mmBtu/hr, and exhausting to stack CRN-0150-01-17-CC23-S.
 - (8) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-02-17-CC23, located in Building 150, constructed in 1972, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0150-02-17-CC23-S.
 - (9) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-03-17-CC23, located in Building 150, constructed in 1989, with a maximum capacity of 25.2 mmBtu/hr, and exhausting to stack CRN-0150-03-17-CC23-S.
 - (10) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0199-01-23-JJ14, located in Building 199, constructed in 1978, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0199-01-23-JJ14-S.
 - (11) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0199-02-23-JJ14, located in Building 199, constructed in 1978, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0199-02-23-JJ14-S.

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SECTION D.2

FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)]

- (12)Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-1819-01-17-Y23, located in Building 1819, constructed in 1981, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-1819-01-17-Y23-S.
- (13)Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-1819-02-17-Y23, located in Building 1819, constructed in 1981, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-1819-02-17-Y23-S.
- (14)Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2087-01-10-S30, located in Building 2087, constructed in 1978, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-2087-01-10-S30-S.
- (15)Iron Fireman natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2692-01-17-W27, located in Building 2692, constructed in 1983, with a maximum capacity of 3.01 mmBtu/hr, and exhausting to stack CRN-2692-01-17-W27-S.
- (16)Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-01-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-01-12-M41-S.
- (17)Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-02-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-02-12-M41-S.
- (18)Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-03-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-03-12-M41-S.
- (19)Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-3234-02-17-U26, located in Building 3234, constructed in 1992, with a maximum capacity of 8.234 mmBtu/hr, and exhausting to stack CRN-3234-02-17-U26-S.
- (20)Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-3234-03-17-U26, located in Building 3234, constructed in 1992, with a maximum capacity of 8.234 mmBtu/hr, and exhausting to stack CRN-3234-03-17-U26-S.
- (21)Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0041-01-17-U26, located in Building 41, constructed in 1977, with a maximum capacity of 10.0 mmBtu/hr, and exhausting to stack CRN-0041-01-17-U26-S.
- (22)Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0041-02-17-U26, located in Building 41, constructed in 1983, with a maximum capacity of 6.9 mmBtu/hr, and exhausting to stack CRN-0041-02-17-U26-S.
- (23)Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0064-01-10-T27, located in Building 64, constructed in 1976, with a maximum capacity of 10.0 mmBtu/hr, and exhausting to stack CRN-0064-01-10-T27-S.

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SECTION D.2

FACILITY OPERATION CONDITIONS (Continued)

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Facility Description [326 IAC 2-7-5(15)]

- (24) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0115-02-23-GG12, located in Building 115, constructed in 1985, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0115-02-23-GG12-S.
- (25) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0128-02-17-W25, located in Building 128, constructed in 1984, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0128-02-17-W25-S.
- Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0149-01-10-S30, located in Building 149, constructed in 1980, with a maximum capacity of 6.7 mmBtu/hr, and exhausting to stack CRN-0149-01-10-S30-S.
- (27) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0149-02-10-S30, located in Building 149, constructed in 1980, with a maximum capacity of 6.7 mmBtu/hr, and exhausting to stack CRN-0149-02-10-S30-S.
- (28) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0180-01-17-W22, located in Building 180, constructed in 1999, with a maximum capacity of 4.2 mmBtu/hr, and exhausting to stack CRN-0180-01-17-W22-S.
- (29) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0180-02-17-W22, located in Building 180, constructed in 1999, with a maximum capacity of 4.2 mmBtu/hr, and exhausting to stack CRN-0180-02-17-W22-S.
- (30) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2517-01-10-T21, located in Building 2517, constructed in 1981, with a maximum capacity of 4.85 mmBtu/hr, and exhausting to stack CRN-2517-01-10-T21-S.
- (31) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2517-02-10-T21, located in Building 2517, constructed in 1981, with a maximum capacity of 4.85 mmBtu/hr, and exhausting to stack CRN-2517-02-10-T21-S.
- Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2523-01-9-K18, located in Building 2523, constructed in 1983, with a maximum capacity of 17.38 mmBtu/hr, and exhausting to stack CRN-2523-01-9-K18-S.
- Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2523-02-9-K18, located in Building 2523, constructed in 1983, with a maximum capacity of 17.4 mmBtu/hr, and exhausting to stack CRN-2523-02-9-K18-S.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter Emissions Limitations [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from the following boilers which were existing and in operation or which received permits to construct prior to September 21, 1983 shall not exceed 0.05 pound per million Btu heat input (Ib/mmBtu) for each boiler.

CRN-0041-01-17-U26, located in Building 41;

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CRN-0041-02-17-U26, located in Building 41;
CRN-0064-01-10-T27, located in Building 64;
CRN-0140-01-17-Y25, located in Building 140;
CRN-0140-02-17-Y25, located in Building 140;
CRN-0149-01-10-S30, located in Building 149;
CRN-0149-02-10-S30, located in Building 149;
CRN-0150-02-17-CC23, located in Building 150;
CRN-0199-01-23-JJ14, located in Building 199;
CRN-0199-02-23-JJ14, located in Building 199;
CRN-1819-01-17-Y23, located in Building 1819;
CRN-1819-02-17-Y23, located in Building 1819;
CRN-2087-01-10-S30, located in Building 2087;
CRN-2517-01-10-T21, located in Building 2517;
CRN-2517-02-10-T21, located in Building 2517;
CRN-2523-01-9-K18, located in Building 2523;
CRN-2523-02-9-K18, located in Building 2523; and
CRN-2692-01-17-W27, located in Building 2692,
```

This limitation was calculated using the following equation:

Pt = (C) (a) (h) Where C =
$$50 \ \mu/m^3$$
 Q = total source capacity (lbs/mmBtu) N = number of stacks a = 0.67 h = average stack height (feet) Pt = pounds of particulate matter emitted per million Btu heat input (lb/mmBtu)

Particulate Matter Emissions Limitations [326 IAC 6-2-4] D.2.2

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions Limitations), particulate emissions from all boilers receiving permits to construct after September 21, 1983 shall not exceed 0.029 pound per million Btu heat input (lb/mmBtu) for each boiler.

```
CRN-0115-01-23-GG12, located in Building 115;
CRN-0115-02-23-GG12, located in Building 115;
CRN-0115-03-23-GG12, located in Building 115;
CRN-0128-02-17-W25, located in Building 128;
CRN-0150-01-17-CC23, located in Building 150;
CRN-0150-03-17-CC23, located in Building 150;
CRN-0180-01-17-W22, located in Building 180;
CRN-0180-02-17-W22, located in Building 180;
CRN-2737-01-12-M41, located in Building 2737;
CRN-2737-02-12-M14, located in Building 2737;
CRN-2737-03-12-M41, located in Building 2737;
CRN-3234-02-17-U26, located in Building 3234;
CRN-3234-03-17-U26, located in Building 3234,
CRN-0128-01-17-W25, located in Building 128; and
CRN-0128-03-17-W25, located in Building 128,
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This limitation was calculated using the following equation:

Pt = Where: Pt = pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input. Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

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D.2.3 Sulfur Dioxide Emissions Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, the following boilers:

```
CRN-0041-01-17-U26, located in Building 41;
CRN-0041-02-17-U26, located in Building 41:
CRN-0064-01-10-T27, located in Building 64;
CRN-0115-02-23-GG12, located in Building 115;
CRN-0115-03-23-GG12, located in Building 115;
CRN-0128-02-17-W25, located in Building 128;
CRN-0128-03-17-W25, located in Building 128;
CRN-0140-01-17-Y25, located in Building 140;
CRN-0140-02-17-Y25, located in Building 140;
CRN-0149-01-10-S30, located in Building 149;
CRN-0149-02-10-S30, located in Building 149;
CRN-0150-01-17-CC23, located in Building 150;
CRN-0150-02-17-CC23, located in Building 150;
CRN-0150-03-17-CC23, located in Building 150;
CRN-0180-01-17-W22, located in Building 180;
CRN-0180-02-17-W22, located in Building 180;
CRN-0199-01-23-JJ14, located in Building 199;
CRN-0199-02-23-JJ14, located in Building 199;
CRN-1819-01-17-Y23, located in Building 1819:
CRN-1819-02-17-Y23, located in Building 1819;
CRN-2087-01-10-S30, located in Building 2087;
CRN-2517-01-10-T21, located in Building 2517;
CRN-2517-02-10-T21, located in Building 2517;
CRN-2523-01-9-K18, located in Building 2523;
CRN-2523-02-9-K18, located in Building 2523;
CRN-2692-01-17-W27, located in Building 2692;
CRN-2737-01-12-M41. located in Building 2737:
CRN-2737-02-12-M41, located in Building 2737;
CRN-2737-03-12-M41. located in Building 2737:
CRN-3234-02-17-U26, located in Building 3234; and
CRN-3234-03-17-U26, located in Building 3234,
```

shall each be limited to five-tenths (0.5) pounds per million Btu for distillate oil combustion.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

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(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

- (a) Visible emission notations of the boiler stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and when combusting fuel oil only. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.3, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does not require the certification by the "A responsible official" as defined by 326 IAC 2-7-1(34); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

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The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and

maintenance records and all original strip-chart recordings for continuous monitoring

instrumentation, and copies of all reports required by this permit.

To document compliance with Condition D.2.6, the Permittee shall maintain records of (b) visible emission notations of the boiler stack exhausts.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

The natural gas fired boiler certification reporting form shall be submitted when submitting monitoring, testing reports/results or other documents as required by this permit.

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SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (c) Three (3) Carpentry Shops, identified as:
 - (1) CRN-0056-04-10-T21, located in Building 56, using a wood usage of 74,880 board feet per year, with a process weight rate of 0.14 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-0056-04-10-T21-S.
 - (2) CRN-0224-02-23-HH12, located in Building 224, using a wood usage of 1,000,000 board feet per year, with a process weight rate of 0.69 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-0224-02-23-HH12-S.
 - (3) CRN-2720-04-23-GG12, located in Building 2720, using a wood usage of 14,000 board feet per year, with a process weight rate of 0.25 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-2720-04-23-GG12-S.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following carpentry shops:

- (a) CRN-0056-04-10-T21 shall not exceed 1.1 pounds per hour when operating at a process weight rate of 0.14tons per hour.
- CRN-0224-02-23-HH12 shall not exceed 3.2 pounds per hour when operating at a (b) process weight rate of 0.69 tons per hour.
- (c) CRN-2720-04-23-GG12 shall not exceed 1.6 pounds per hour when operating at a process weight rate of 0.25 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.3 Particulate Matter (PM)

The cyclones for PM control shall be in operation at all times when the carpentry operations are in operation.

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Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.4 Visible Emissions Notations

- (a) Daily visible emission notations of the cyclone stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.5 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the woodworking operations when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.3.6 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.7 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain records of daily visible emission notations of the cyclone stack exhaust.
- (b) To document compliance with Condition D.3.5, the Permittee shall maintain records of the results of the inspections required under Condition D.3.5.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.4

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (d) Thirty-two (32) paint booths:
 - CRN-0102-01-23-FF14, located in Building 102, constructed in 1993, using a dry filter (1) to control particulate matter emissions.
 - (2)CRN-0104-01-23-HH16, located in Building 104, constructed in 1983, using a water wall to control particulate matter emissions.
 - CRN-0104-02-23-HH16, located in Building 104, constructed in 1983, using a water (3)wall to control particulate matter emissions.
 - (4) CRN-0106-01-23-HH13, located in Building 106, constructed in 1960, using a water wall to control particulate matter emissions.
 - (5) CRN-0107-01-23-HH13, located in Building 107, constructed in 1980, using a dry filter to control particulate matter emissions.
 - (6) CRN-0107-02-23-HH13, located in Building 107, constructed in 1980, using a water wall to control particulate matter emissions.
 - (7) CRN-0107-03-23-HH13, located in Building 107, constructed in 1980, using a dry filter to control particulate matter emissions.
 - CRN-0107-04-23-HH13, located in Building 107, constructed in 1980, using a wet wall (8)to control particulate matter emissions.
 - (9)CRN-0136-01-17-Z26, located in Building 136, constructed in 1963, using a dry filter to control particulate matter emissions.
 - CRN-0155-01-17-BB25, located in Building 155, constructed in 1986, using a dry filter (10)to control particulate matter emissions.
 - (11)CRN-0155-02-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (12)CRN-0155-03-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (13)CRN-0155-04-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.
 - (14)CRN-0169-01-24-EE22, located in Building 169, constructed in 1950, using a dry filter to control particulate matter emissions.
 - (15)CRN-2520-01-17-Y26, located in Building 2520, constructed in 1968, using a water wall to control particulate matter emissions.
 - Bomb Finishing Line, with a maximum capacity of thirteen (13) units per hour and (16)Projectile Renovation Operations with a maximum capacity of 120 units per hour, consisting of the following units:

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SECTION D.4

FACILITY CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)]

- (i) CRN-2728-01-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.
- CRN-2728-02-12-N42, located in Building 2728, constructed in 1999, using a (ii) dry filter to control particulate matter emissions.
- (iii) CRN-2728-03-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.
- CRN-3234-09-17-U26, located in Building 3234, constructed in 1994, using a dry filter (17)to control particulate matter emissions.
- CRN-3234-10-17-U26, located in Building 3234, constructed in 1994, using a dry filter (18)to control particulate matter emissions.
- (19)CRN-3234-15-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.
- (20)CRN-0101-01-23-FF13, located in Building 101, constructed in 1945, using a dry filter to control particulate matter emissions.
- (21)CRN-0109-01-23-GG14, located in Building 109, constructed in 1981, using a dry filter to control particulate matter emissions.
- (22)CRN-0174-01-24-FF21, located in Building 174, constructed in 1986, using a dry filter to control particulate matter emissions.
- (23)CRN-0198-01-23-II15, located in Building 198, constructed in 1980, using a dry filter to control particulate matter emissions.
- (24)CRN-0227-01-23-HH12, located in Building 227, constructed prior to 1991, using a dry filter to control particulate matter emissions.
- (25)CRN-0227-02-23-HH12, located in Building 227, constructed prior to 1991, using a dry filter to control particulate matter emissions.
- (26)CRN-2074-03-16-DD13, located in Building 2074, constructed in 1987, using a dry filter to control particulate matter emissions.
- CRN-2517-05-10-T21, located in Building 2517, constructed in 1969, using a dry filter (27)to control particulate matter emissions.
- (28)CRN-2697-01-17-W24, located in Building 2697, constructed in 1983, using a dry filter to control particulate matter emissions.
- (29)CRN-2713-01-17-X23, located in Building 2713, constructed in 1979, using a dry filter to control particulate matter emissions.
- (30)CRN-2805-01-23-GG19, located in Building 2805, constructed in 1969, using a dry filter to control particulate matter emissions.

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SECTION D.4

FACILITY CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)]

- (31)CRN-2805-02-23-GG19, located in Building 2805, constructed in 1995, using a dry filter to control particulate matter emissions.
- (32)CRN-3168-02-17-V28, located in Building 3168, constructed in 1988, using a dry filter to control particulate matter emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

Particulate Matter Emissions Limitations [326 IAC 6-3-2]

The PM from each paint booth shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to Significant Source Modification 101-11153-00005, the paint booths identified as:

- (a) CRN-2728-01-12-N42, located in Building 2728; and
- (b) CRN-2728-02-12-N42, located in Building 2728; and
- (c) CRN-2728-03-12-N42, located in Building 2728,
 - (1) shall be limited to less than 40.0 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period. This usage limit is required to limit the potential to emit of VOC to less than 40.0 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.
 - (2)shall be limited to less than 25.0 tons of PM and less than 15.0 tons of PM₁₀. This usage limit is required to limit the potential to emit of PM₁₀ to less than 25.0 tons of PM and 15.0 tons of PM₁₀ per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

General Provisions Relating to VOC Rules: Military Specifications [326 IAC 8-1-7] and Sitespecific RACT Plan [326 IAC 8-1-5]

Pursuant to 326 IAC 8-1-7 (Military Specifications) and Significant Source Modification (a) 101-11153-00005, the volatile organic compound (VOC) content of coating delivered to the following:

Bomb Finishing Line, with a maximum capacity of thirteen (13) units per hour and Projectile Renovation Operations with a maximum capacity of 120 units per hour, consisting of the following units:

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- (1) CRN-2728-01-12-N42, located in Building 2728, constructed in 1999;
- (2) CRN-2728-02-12-N42, located in Building 2728, constructed in 1999;
- (3) CRN-2728-03-12-N42, located in Building 2728, constructed in 1999,

shall be limited to 5.45 pounds of VOCs per gallon of coating less water, for air dried coatings for each paint booth.

- (b) Pursuant to 326 IAC 8-1-7 (Military Specifications) and Site-specific RACT plan [326 IAC 8-1-5] the volatile organic compounds (VOC) content of coating delivered to the following:
 - (1) CRN-0104-01-23-HH16, located in Building 104, constructed in 1983;
 - (2) CRN-0104-02-23-HH16, located in Building 104, constructed in 1983;
 - (3) CRN-0104-01-23-HH13, located in Building 107, constructed in 1980;
 - (4) CRN-0104-02-23-HH13, located in Building 107, constructed in 1980;
 - (5) CRN-0104-03-23-HH13, located in Building 107, constructed in 1980;
 - (6) CRN-0104-04-23-HH13, located in Building 107, constructed in 1980;
 - (7) CRN-0104-02-17-BB25, located in Building 155, constructed in 1986;
 - (8) CRN-0104-03-17-BB25, located in Building 155, constructed in 1986;
 (9) CRN-0104-04-17-BB25, located in Building 155, constructed in 1986; and
 - (10) CRN-0104-01-17-W24, located in Building 2697, constructed in 1983;

shall be limited to no greater than 5.45 pounds of VOCs per gallon of coating less water, for air dried coatings for each paint booth.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.4.4 Miscellaneous Metal Coating Operations [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to each of the following paint booths shall be limited to 3.5 pounds of VOCs per gallon of coating less water averaged on a daily basis for each paint booth:

- (a) CRN-0102-01-23-FF14, located in Building 102, constructed in 1993; and
- (b) CRN-0155-01-17-BB25, located in Building 155, constructed in 1986; and
- (c) CRN-3234-09-17-U26, located in Building 3234, constructed in 1994; and
- (d) CRN-3234-10-17-U26, located in Building 3234, constructed in 1994; and
- (e) CRN-3234-15-17-U26, located in Building 3234, constructed in 1994; and
- (f) CRN-0109-01-23-GG14, located in Building 109, constructed in 1981; and
- (g) CRN-0174-01-24-FF21, located in Building 174, constructed in 1986; and
- (h) CRN-0198-01-23-II15, located in Building 198, constructed in 1980; and
- (i) CRN-0227-01-23-HH12, located in Building 227, constructed prior to 1991; and
- (j) CRN-0227-02-23-HH12, located in Building 227, constructed prior to 1991; and
- (k) CRN-2074-03-16-DD13, located in Building 2074, constructed in 1987; and
- (I) CRN-2805-02-23-GG19, located in Building 2805, constructed in 1995; and
- (m) CRN-3168-02-17-V28, located in Building 3168, constructed in 1988,

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

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Compliance Determination Requirements

D.4.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.4.2, D.4.3, and D.4.4, shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.4.7 VOC Emissions

Compliance with Conditions D.4.2, D.4.3, and D.4.4 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.4.8 Particulate Matter (PM)

The dry filters and water walls for PM control shall be in operation at all times the paint booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. Daily inspections shall be performed for the water walls and wet walls to verify the level where surface agitation indicates impact of the air flow. Water shall be kept free of solids and floating material that reduces the capture efficiency of the water walls and wet walls. To monitor the performance of the water walls and wet walls and the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
 - (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C -Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
 - (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.10 Record Keeping Requirements

(a) To document compliance with Conditions D.4.2. D.4.3, and D.4.4, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.4.2. D.4.3, and D.4.4.

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- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;
- (3) The volume weighted VOC content of the coatings used for each month;
- (4) The cleanup solvent usage for each month;
- (5) The total VOC usage for each month; and
- (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.4.9, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.4.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

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SECTION D.5

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FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15):

One (1) Asphaltic Coating Operation, identified as CRN-0155-05-17-BB25, located in Building (e) 155, with a maximum usage of 3.64 tons per hour, using an electrostatic precipitator for PM control, and exhausting to stack CRN-0155-05-17-BB25-S.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the asphaltic coating operation shall not exceed 9.74 pounds per hour when operating at a process weight rate of 3.64 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

Electrostatic Precipitator (ESP) Operating Condition

The ESP shall be operated at all times the asphaltic coating operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Preventive Inspections D.5.4

The following inspections shall be performed at least once every two years in accordance (a) with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:

Plate and electrode alignment; ESP component/controller failure; Air and water infiltration: Spare parts availability; and

- (b) Plate and electrode alignment measurements shall be taken whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past six months.
- (c) All other inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.

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(d) Appropriate response steps for any discrepancies in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports.

D.5.5 Visible Emissions Notations

- (a) Visible emission notations of electrostatic precipitator stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.6 Record Keeping Requirements

- (a) To document compliance with Condition D.5.4, the Permittee shall maintain the following:
 - (1) Records of the results of the inspections required under Condition D.5.4; and
 - (2) All response steps taken and the outcome for each.
 - (3) All preventive maintenance measures taken; and
 - (4) All response steps taken and the outcome for each.
- (b) To document compliance with Condition D.5.5, the Permittee shall maintain records of visible emission notations of the electrostatic precipitator stack exhaust.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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FACILITY OPERATION CONDITIONS

SECTION D.6

Facility Description [326 IAC 2-7-5(15)]:

- (f) Open Burning/ Open Detonation:
 - (1) Open Burning of Ordnance at the Ammunition Burning Ground, identified as CRN-ABG-01-19-DD43, with a maximum usage of 2.3 mmlb/yr (1150 tons/yr) of Dunnage; 0.64 mmlb/yr (320 tons/yr) of Explosive; 4.7 mmlb/yr (2350 tons/yr) of Propellant.
 - (2) Open Detonation of Ordnance at the Demolition Range, identified as CRN-DR-01-24-KK21, with a maximum usage of 0.13 mmlb/yr (65 tons/yr) of Dunnage; 1.6 mmlb/yr (800 tons/yr) of Explosive; 0.52 mmlb/yr (260 tons/yr) of Propellant.
 - Open Burning of Ordnance at the Old Rifle Range, identified as CRN-ORR-01-24-JJ24, with a maximum usage of 0.15 mmlb/yr (75 tons/yr) of Dunnage; 0.032 mmlb/yr (16 tons/yr) of Explosive; 0.012 mmlb/yr (6 tons/yr) of Propellant.
 - (4) Fast and Slow Cookoff at the Ordnance Test Area, identified as CRN-OTA-01-29-WW18, with a maximum usage of 10,000 units of various ordnance per year.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Open Burning [326 IAC 4-1]

Pursuant to 326 IAC 4-1-4.1 (a)(3) (Open Burning) and Variance APC-6236, issued on September 25, 2000, burning of explosives, propellants, pyrotechnics and wood dunnage at the Ammunition Burning Grounds; explosives, propellants and wood dunnage at the Old Rifle Range Demolition Area; and explosives, lithium batteries and ordnance items at the Demolition Range:

Following are the conditions for burning the above listed waste:

- (a) Salvageable material shall be removed and not burned. All burning shall be conducted in a manner to prevent soil contamination.
- (b) Fire(s) shall not be ignited or fueled with tires or smoke producing petroleum products. Minimal amounts of clean burning petroleum products may be used for starting fires.
- (c) No burning shall be conducted during unfavorable meteorological conditions such as: high winds, temperature inversions, or air stagnation; when an open burning ban has been officially declared by either appropriate state or local officials, unless a written preapproval has been obtained from local or state officials; or when a pollution alert or ozone action day has been declared. You may contact IDEM, OAQ (1-800-451-6027) for information regarding pollution alerts and ozone action days.
- (d) Burning shall be conducted during daylight hours only and all fires shall be extinguished prior to sunset, with the exception of emergency treatment operations applicable to the Emergency Provisions in Section B.
- (e) If at any time the burning creates an air pollution problem, a threat to public health, a nuisance, or a fire hazard, the burning shall be extinguished.

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- (f) No burning shall take place within one hundred (100) feet of any structure, excluding process structures, or powerline; or three hundred (300) feet of a frequently traveled road, fuel storage area, or pipeline.
- (g) Fire(s) shall be attended at all times while burning and until completely extinguished.
- (h) All burning must comply with other federal, state, and local laws, regulations or ordinances, including 40 CFR 61, Subpart M (National Emissions Standards For Asbestos).
- (i) Fire(s) must be conducted on property where waste is derived.
- (j) Material contaminated with propellants, explosives, or pyrotechnics (pep) shall be burned. Uncontaminated wood dunnage may also be used as a fuel source. All uncontaminated material must be disposed of in an approved manner other than burning.
- (k) An attempt must be made to minimize the amount of material to be open burned. In as much as feasible, small arms ammunition shall be shipped off base for disposal in an approved incinerator.

D.6.2 RCRA Air Standards and Limitations

- (a) The Permittee shall comply with all applicable provisions of 40 CFR 264, Subpart CC.
- (b) The Permittee shall notify the Regional Administrator upon planning to treat more than 70 shots per event at the Demolition Range.
- (c) The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 3004(n) of RCRA, as amended by HSWA.
- (d) The Permittee shall not exceed the material quantities as follows:
 - (1) Ammunition Burning Grounds (ABG)

Unit Number	Material	Limited Treatment Quality (NEW)	
		8-hour Period	Quarterly Period
		(pounds)	(tons)
3a-ABG	Propellants	45,000	875
3b-ABG	Explosives	15,000	289
3c-ABG	Production Scrap	45,000	875
6-ABG	Red Phosphorous	1,600	11.2
7-ABG	Pyrotechnics	200	1.4
8-ABG	Black Powder Slurry	250	1.75
9-ABG	Contaminated Waste Materials	400	2.8
10-ABG	Contaminated Sludges	2,000	14.0
11-ABG	Red Phosphorous Sludge	200	1.4
12-ABG	Pyrotechnics Fuses/Small Items	300	2.1
13-ABG	Explosives/Pyrotechnics	40,000	175

(2) Old Rifle Range (ORR)

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Unit Number	Material	Limited Treatment Quantity (NEW)	
		8-hour Period (pounds)	Quarterly Period (tons)
3a-ORR	Yellow D	6,000	60
3b-ORR	Projectile Bodies	9,000	22.5

(3) Demolition Range

Unit Number	Material	Limited Treatment Quantity (NEW)	
		8-hour Period (pounds)	Quarterly Period (tons)
3-DR	Explosives	55,000	687.5

D.6.3 Source Modification [326 IAC 2-7-10.5]

Pursuant to 326 IAC 2, any change or modification to open burn any material not addressed in Condition D.6.2 must have prior approval from the Office of Air Quality.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.4 Air Quality Requirements [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-1.1-5 (Air Quality Requirements), the Permittee shall establish ambient monitoring sites for lead (Pb) to demonstrate protection of public health. The following requirements shall be met to demonstrate compliance with the ambient monitoring sites:

- (a) The monitoring must be performed using U.S. EPA approved methods, procedures, and quality assurance programs.
- (b) Monitoring sites shall be established at two locations near the two (2) closest populous locations along the prevailing annual wind direction.
- (c) After the 36 month period of monitoring, the Permittee may petition IDEM, OAQ for the removal of the monitoring sites if compliant lead levels have been established and will continue to comply with the protection of public health. The monitoring requirements may be continued beyond the minimum 36 month period if determined to be warranted by the IDEM, OAQ.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.5 Record Keeping Requirements

- (a) To document compliance with Condition D.6.2, the Permittee shall maintain records of all materials open burned and open detonated.
- (b) To document compliance with Condition D.6.4(c), the Permittee shall maintain records of all ambient data for lead for at least the minimum 36 month monitoring period.

D.6.6 Reporting Requirements

- (a) To document compliance with Condition D.6.1(j), the Permittee shall submit a quarterly report detailing the type and amount of waste burned.
- (b) To document compliance with Condition D.6.1(k), the Permittee shall submit a quarterly report of all ammunition shipped off-base.
- (c) To document compliance with Condition D.6.4(a), the Permittee shall submit a Quality Assurance Plan and Protocol (QAPP) within 90 calendar days prior to the commencement of monitoring. The QAPP must be approved by IDEM, OAQ prior to the commencement of monitoring. The QAPP shall be submitted to the following address:

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Indiana Department of Environmental Management Ambient Monitoring Section, Office of Air Quality 2525 North Shadeland Avenue Indianapolis, Indiana 46219

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SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Chromium Electroplating Process:

(g) One (1) Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, located in Building 3234, equipped with a packed-bed scrubber, and exhausting to stack CRN-3234-13-17-U26-S.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

 The provisions of 40 CFR Part 63, Subpart A General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N.
- D.7.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]

 The provisions of 40 CFR 63, Subpart N National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26.
- D.7.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]
 - (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction. The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.
 - (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 by:
 - (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed one-hundredth milligrams of total chromium per dry standard cubic meter of ventilation air (0.01 mg/dscm) [equivalent to four and four-tenths times ten raised to the power of negative six grains of total chromium per dry standard cubic foot of ventilation air (4.4x10⁻⁶ gr/dscf)]; or
 - (2) Not allowing the surface tension of the anodizing bath contained within the tank to exceed forty-five dynes per centimeter (45 dynes/cm) [equivalent to three and one-tenth times ten raised to the power of negative three pound-force per foot (3.1x10⁻³ lb_f/ft)] at any time during operation of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 when a chemical fume suppressant containing a wetting agent is used.
 - (3) Not allowing the foam blanket thickness of the anodizing bath contained within the tank to be less than two and fifty-four hundredths centimeters (2.54 cm) [equivalent to one inch (1 in)] at any time during operation the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 when a foam blanket is used.

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(c) Pursuant to 40 CFR 63.340(a), the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, is considered existing and non-affected. The permittee shall comply with the requirements of this condition on and after the start-up date of the tank.

D.7.4 Work Practice Standards [40 CFR 63.342(f)]

The following work practice standards apply to the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26:

- (a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, including the air pollution control techniques, the add-on control device and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.7.6.
- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.7.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
- (d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAQ, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.
- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAQ may require that the Permittee make changes to the OMP required by Condition D.7.6. Revisions may be required if IDEM, OAQ finds that the plan:
 - (1) Does not address a malfunction or period of excess emissions that has occurred;
 - (2) Fails to provide for the operation of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the air pollution control techniques, or the add-on control device and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or
 - (3) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, monitoring equipment or other causes of excess emissions as quickly as practicable.

For the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the permittee shall comply with the requirements of this condition on and after the start-up date of each tank.

The work practice standards that address operation and maintenance must be followed during malfunctions and periods of excess emissions.

D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), in accordance with Section B-Preventive Maintenance Plan, of this permit, is required for the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 and the add-on control device.

D.7.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

(a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26. The OMP shall specify the operation and maintenance criteria

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for the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the air pollution control techniques, the add-on control device and monitoring equipment and shall include the following elements:

- (1) For a packed-bed scrubber (PBS):
 - (A) Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - (B) Quarterly visual inspection of the back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - (C) Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.
 - (D) Add fresh makeup water to the top of the packed bed if greater than 50% of the scrubber water is drained.
- (2) A standardized checklist to document the operation and maintenance criteria for the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the air pollution control device, the add-on air pollution control device and the monitoring equipment.
- (3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.
- (4) A systematic procedure for identifying malfunctions and periods of excess emissions of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the air pollution control device, the add-on air pollution control device and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.7.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.7.6(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the air pollution control device, the add-on air pollution control device and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.
- (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAQ.
- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAQ for the life of the Chromic Acid Anodizing Tank,

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identified as CRN-3234-13-17-U26 or until the tank is no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAQ for a period of five (5) years after each revision to the plan.

Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

- D.7.7 Performance Testing [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]
 - (a) The Permittee is required to conduct an initial performance test within 180 days after startup of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 using the procedures and methods in 40 CFR 63.344 and 40 CFR 63.7 and in accordance with Section C Performance Testing.
 - (b) Pursuant to 40 CFR 63.343(b)(2), the Permittee would not be required to conduct an initial performance test if the source meets all of the following criteria:
 - (1) the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 is a chromium anodizing tank;
 - (2) A wetting agent is used in the anodizing bath to inhibit chromium emissions from the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26; and
 - (3) The Permittee complies with the applicable surface tension limit in Condition D.7.3 as demonstrated through the continuous compliance monitoring required by 40 CFR 63.343(c)(5)(ii).
 - (c) Any change, modification, or reconstruction of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the air pollution control techniques, the add-on control device or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.
- D.7.8 Establishing Site-Specific Operating Parameter Values [40 CFR 63.343(c)] [40 CFR 63.344(d)]
 - (a) During the initial performance test and pursuant to 40 CFR 63.343(c)(2)(i), when using a packed-bed scrubber to comply with the limits specified in Condition D.7.3, the Permittee shall determine the outlet chromium concentration using the test methods in 40 CFR 63.344(c) and shall establish as site-specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to compliance with the applicable emission limitation using the procedures in 40 CFR 63.344(d)(4) and (5). The Permittee may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the Permittee may set as the compliant value the average pressure drop and inlet velocity pressure measured over the three test runs of one performance test, and accept ?1 inch of water column from the pressure drop value and ?10 percent from the velocity pressure value as the compliant range.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.7.9 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)] [40 CFR 63.343(c)]
 - (a) Pursuant to 40 CFR 63.343(c)(2)(ii), when using a packed-bed scrubber to comply with the limits specified in Condition D.7.3, the Permittee shall monitor and record the velocity pressure at the inlet to the packed-bed scrubber system during tank operation once each day that the chromium anodizing tank is operating. To be in compliance with the standards, the scrubber system shall be within ?10 percent of the velocity pressure value established during the initial performance test, and within ?1 inch of water column of the

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pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests.

(b) Tank operation or operating time is defined as that time when a part is in the tank and there is a current running through the tank. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less than fifteen minutes, that time between plating the two parts is considered operating time.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.10 Record Keeping Requirements [326 IAC 2-7-5(3)] [40 CFR 63.346]

The Permittee shall maintain records to document compliance with Conditions D.7.3, D.7.4 and D.7.6 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the air pollution control techniques, the add-on control device system and monitoring equipment to document that the inspection and maintenance required by Conditions D.7.8 and D.7.9 have taken place. The record can take the form of a checklist and should identify the following:
 - (1) The device inspected;
 - (2) The date of inspection;
 - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
 - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the add-on control device and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the add-on control device and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, the add-on control device and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.
- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.

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- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.7.9(b), of each tank, during the reporting period.
- (k) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.7.11.

D.7.11 Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347]

The notifications and reports required in this section shall be submitted to IDEM, OAQ using the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
 - (1) Initial Notifications
 The Permittee shall notify IDEM, OAQ in writing that the source is subject to 40
 CFR Part 63, Subpart N. The notification shall be submitted no later than one hundred eighty (180) days after the compliance date and shall contain the information listed in 40 CFR 63.347(c)(1).
 - (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
 - (A) The NCS shall be submitted to IDEM, OAQ, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
 - (B) The NCS for the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 shall be submitted to IDEM, OAQ no later than forty-five (45) days following completion of the compliance demonstration pursuant to Section C Performance Testing.
 - (3) Notification of Construction or Reconstruction
 Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank
 subject to 40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR
 63.344(e)) without submitting a Notification of Construction or Reconstruction
 (NCR) to IDEM, OAQ. In addition, the Permittee may not change, modify, or
 reconstruct the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26
 without submitting a Notification of Construction or Reconstruction (NCR) to
 IDEM, OAQ.
 - (A) The NCR shall contain the information identified in 40 CFR 63.345(b) (2) and (3).
 - (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device.
 - (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 serves as this notification.

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(D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ before construction, modification, or reconstruction may commence.

(b) Performance Test Results

The Permittee shall document results from the initial performance test and any future performance tests in a complete test report that contains the information required in 40 CFR 344(a).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report

The Permittee shall prepare summary reports to document the ongoing compliance status of the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because the Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26 is located at a site that is a major source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be completed and submitted according to the following schedule.

- (1) This report shall be submitted semiannually on a calendar year basis, unless otherwise directed by IDEM, OAQ. The report shall be submitted within thirty (30) days after the end of each reporting period (which ends June 30 and December 31 respectively).
- (2) If the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c) show that the emission limit has been exceeded, quarterly reports shall be submitted.

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted quarterly until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

(d) IDEM, OAQ may determine on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of this facility.

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SECTION D.8

Crane, Indiana

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(h) One (1) Stripping Tank (open-top vapor degreaser), constructed in 1992, identified as CRN-3234-12-17-U26, located in Building 3234, and exhausting to stack CRN-3234-12-17-U26-S.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart T.

D.8.2 National Emissions Standards for Halogenated Solvent Cleaning [40 CFR 63, Subpart T] 40 CFR 63. Subpart 63 is incorporated by reference as 326 IAC 20-6-1. Since the source has not determined the solvent or final design parameters of this stripping tank, the source shall comply with the provisions of this NESHAP upon operation and notify the IDEM, OAQ of all final determinations. Upon receipt of the final determinations, the IDEM, OAQ will amend this permit to include all required provisions to ensure compliance with 40 CFR 63, Subpart T.

D.8.3 Work Practice Standards [40 CFR 63.463]

- Pursuant to 40 CFR 63.463(a) & (b), the Permittee shall conform to the following design (a) requirements:
 - (1) The cleaning machine shall be designed or operated such that, it has an idling and downtime mode cover, as described in 40 CFR63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects.

or

- (2) The cleaning machine shall be designed or operated such that it has a reduced room draft as described in 40 CFR63.463(e)(2)(ii).
- (3) Cleaning machine shall have a freeboard ratio of 0.75 or greater.
- (4) Cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minutes (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- (5)Cleaning machine shall be equipped with a device that shuts off sump heat if the sump liquid solvent level drops to the sump heater coils.
- (6) Cleaning machine shall have a primary condenser.
- (7) Cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- (b) Pursuant to 40 CFR 63.463 (d), the following work and operational practice requirements for the degreasing operation are applicable:

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- (1) Control air disturbances across the cleaning machine opening(s) by placing cover(s) to the solvent cleaning machine during the idling mode and the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.
- (2) The parts baskets or the parts being cleaned in the cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
- (3) Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air.
- (4) Parts shall be oriented so that the solvents drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the commissioner.
- (5) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.
- (6) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.
- (7) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
- (8) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
- (9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the commissioner's satisfaction to achieve the same or better results as those recommended by the manufacturer.
- (10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in appendix B of 40 CFR 63, if requested during an inspection by the commissioner.
- (11) Waste solvents, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
- (12) Sponges, fabric, wood, and paper products shall not be cleaned.
- (13) That pursuant to 40 CFR 63.463 (e), the Permittee shall comply with the following requirements:
 - (A) The Permittee shall conduct monitoring of each control device used to comply with 63.463 as provided in 40 CFR 63.466, monitoring procedures.

(B) Determine during each monitoring period if the control device used to comply with the above standards meets the following requirements:

If a freeboard refrigeration device is used to comply with standards:

(1) The Permittee shall ensure that the chilled air blanket temperature (in EF), measured at the center of the air blanket of the freeboard refrigeration device is no greater than 30% of the solvent's boiling point.

If a reduced room draft is used to comply with standards:

- (2) When using a reduced room draft the Permittee shall:
 - (a) ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at anytime as measured using the procedures in 40 CFR63.466(d).
 - (b) establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR63.466 (d).

If a working-mode cover is used to comply with standards:

- (3) When using a working-mode cover the Permittee shall:
 - (a) ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.
 - (b) ensure that the working-mode cover is maintained free of cracks, holes, and other defects.

If an idling-mode cover is used to comply with standards:

- (4) When using an idling-mode cover the Permittee shall:
 - (a) ensure that the cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place.
 - (b) ensure that the idling-mode cover is maintained free of cracks, holes, and other defects.

If a dwell is used to comply with standards:

- (5) When using a dwell the Permittee shall:
 - (a) determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket, as described in 40 CFR63.465.
 - (b) ensure that, after cleaning, each part is held in the solvent cleaning machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or for the maximum dwell

time determined using the most complex part type or parts basket.

If a superheated vapor system is used to comply with standards:

- (6) When using a superheated vapor system the Permittee shall:
 - (a) ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10EF above the solvent's boiling point.
 - (b) ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system is followed.
 - (c) ensure that parts remain within the superheated vapor for at least the minimum proper dwell time.

If a carbon adsorber is used in conjunction with lip exhaust to comply with standards:

- (7) When using a carbon adsorber in conjunction with a lip exhaust, the Permittee shall:
 - (a) ensure that the concentration of organic solvent in the exhaust from this device does not exceed 100 parts per million of any halogenated HAP compound as measured using the procedure in 40 CFR63.466(e). If the halogenated HAP solvent concentration in the carbon adsorber exhaust exceeds 100 parts per million, the Permittee shall adjust the desorption schedule or replace the disposable canister, if not a regenerative system, so that the exhaust concentration of halogenated HAP solvent is brought below 100 parts per million.
 - (b) ensure that the carbon adsorber bed is not bypassed during desorption.
 - (c) ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.
- (C) An exceedance has occurred if:
 - (1) the requirements of paragraphs (c)(2)(B)(ii), (c)(2)(C)(i), (c)(2)(D)(i), (c)(2)(E),(c)(2)(F)(ii), (c)(2)(F)(ii), (c)(2)(G)(ii), and (c)(2)(G)(iii) of this condition are not met; and
 - (2) the requirements of paragraphs (c)(2)(A), (c)(2)(B)(i), (c)(2)(C)(ii), (c)(2)(D)(ii), (c)(2)(F)(i), and (c)(2)(G)(i) of this condition have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameters must be remeasured immediately upon adjustment or repair and demonstrated to be within the required limits.

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(D) the owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 40 CFR63.468.

D.8.4 Open Top Vapor Degreaser Operations [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open top vapor degreaser operations), the Permittee shall:

- (1) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (2) keep the cover closed at all times except when processing work loads through the degreaser;
- (3) minimize solvent carry-out by:
 - (A) Racking parts to allow complete drainage;
 - (B) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;
 - (C) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (D) Tipping out any pools of solvent on the cleaned parts before removal;
 - (E) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (4) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (5) not occupy more than half of the degreaser=s open top area with the workload;
- (6) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (7) never spray above the vapor level;
- (8) repair solvent leaks immediately, or shut down the degreaser;
- (9) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (10) not use workplace fans near the degreaser opening;
- (11) not allow visually detectable water in the solvent exiting the water separator; and
- (12) provide a permanent, conspicuous label summarizing the operating requirements.

D.8.5 Organic Solvent Degreasing Operations: Open Top Vapor Degreaser Operation and Control Requirements [326 IAC 8-3-6]

- (a) The Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.
 - (2) Equip the degreaser with the following switches:
 - (A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (B) A spray safety switch which shuts off spray pump if the vapor level drops more than ten (10) centimeters (four (4) inches).

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- (3) Equip the degreaser with a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) Equip the degreaser with one (1) of the following control devises:
 - (A) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powdered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet); or
 - (B) A refrigerated chiller; or
 - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser; or
 - (D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty(50) cubic feet per minute per square foot) of air to vapor interface area and an average of less than twenty-five (25) parts per million of solvent is exhausted over one (1) complete adsorption cycle; or
 - (E) Other systems of demonstrated equivalent or better control as those outlined in clauses (A) through (D). Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) The Permittee shall ensure that the following operating requirements are met:
 - (1) Keep the cover closed at all times except when processing workloads through the degreaser.
 - (2) Minimize solvent carryout emissions by:
 - (A) racking articles to allow complete drainage;
 - (B) moving articles in and out of the degreaser at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute);
 - (C) degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (D) tipping out any pools of solvent on the cleaned articles before removal;and
 - (E) allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.
 - (3) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood, or rope.
 - (4) Prohibit occupation of more than one half (½) of the degreaser's open top area with the workload.
 - (5) Prohibit the loading of the degreaser to the point where the vapor level would drop more than ten (10) centimeters (four (4) inches) when the workload is removed.
 - (6) Prohibit solvent spraying above the vapor level.
 - (7) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.
 - (8) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
 - (9) Prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of

degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.

- (10) Prohibit the use of workplace fans near the degreaser opening.
- (11) Prohibit visually detectable water in the solvent exiting the water separator.

D.8.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

D.8.7 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [40 CFR 63.465]

If the Permittee will employ idling emission limit of 40 CFR63.463 (b)(1)(ii) or (b)(2)(ii):

(a) The Permittee shall determine the idling emission rate of the solvent cleaning machine using reference method 307 in Appendix A to this part.

If the Permittee employs dwelling for compliance with 40 CFR63.463:

- (b) The Permittee shall determine the appropriate dwell time for each part or parts basket using the procedure as follows:
 - (1) Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or the parts basket used for this determination must be at room temperatures before being placed in the vapor zone.
 - (2) The proper dwell time for the parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined in paragraph (1) above.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.8 Monitoring Procedures [326 IAC 2-7-6(1)]

If freeboard refrigeration device or superheated vapor is used to comply with standards:

(a) The Permittee shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in paragraph(s) below:

If a freeboard refrigeration device is used to comply with the standards:

(1) The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket of the freeboard refrigeration device, during the idling mode.

If a superheated vapor system is used to comply with the standards:

- (2) The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.
- (b) The Permittee shall conduct monitoring and record the results on a monthly basis for the control devices, as appropriate, specified in paragraph below:

If a working-mode, downtime-mode, and/or idling mode cover is used to comply with the standards:

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> (1) The Permittee shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.

If a dwell is used to comply with the standards:

- (2) The Permittee shall determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.
- (c) The Permittee shall monitor the hoist speed as described below:
 - (1) The Permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes.
 - (2) The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the Permittee may begin monitoring the hoist speed quarterly.
 - (3) If the exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to the monthly until another year of compliance without an exceedance is demonstrated.
 - (4) If the Permittee can demonstrate to the commissioner=s satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.

If a reduced room draft is used to comply with the standards of (b)(1)(i) or (b)(2)(i):

(d) The Permittee shall conduct monitoring and record the results, for a reduced room draft, as specified in the following paragraphs:

If a reduced room draft is maintained by controlling room parameters:

- (1) The Permittee shall conduct an initial monitoring test of the windspeed and of room parameters, quarterly monitoring of wind speed, and weekly monitoring of room parameters as specified below:
 - (A) measure the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the following procedures:
 - determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.
 - (ii) orient a velometer in the direction of the wind current at each of the four corners of the machine.
 - (iii) record the reading for each corner.
 - (iv) average the values obtained at each corner and record the average wind speed.
 - (B) monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.

OR

If an enclosure is used to achieve a reduced room draft:

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(1) The Permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified below and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.

- (A) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.
- (B) Record the maximum wind speed.

If carbon adsorber is used to comply with the standards:

- (e) The Permittee shall measure and record the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber weekly with a colorimetric detector tube. This test shall be conducted while the solvent cleaning machine is in the working mode and is venting to the carbon adsorber. The exhaust concentration shall be determined using the procedure specified below:
 - (1) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of solvent in air to an accuracy of 25 parts per million by volume.
 - (2) Use the colorimetric detector tube according to the manufacturer's instructions.
 - (3) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other outlet; and 2 stack or duct diameters upstream from any flow disturbance such as bend, expansion, contraction, inlet or outlet.

If complying with idling emission limit standards of 463 (b)(1)(ii) or (b)(2)(ii) and using controls not specified above:

(f) The Permittee shall establish the monitoring frequency for each control and submit it to the commissioner for approval in the initial test report.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.9 Record Keeping Requirements

- (a) The Permittee shall maintain, in written or electronic form, records of the following information specified below, for the life time of the machine,
 - (1) Owners's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
 - (2) The date of installation of the solvent cleaning machine and all of its control devices. If the exact date of the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.

If dwell is used to comply with standards:

(3) Records of the test required in 40 CFR63.465(d) to determine an appropriate dwell time for each part or parts basket.

If the Permittee will employ idling emission standards of 40 CFR63.463 (b)(1)(ii) and 40 CFR(b)(2)(ii):

- (4) The Permittee shall maintain records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test.
- (5) Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine.
- (b) The Permittee shall maintain, in written or electronic form, records of the following information specified below for a period of 5 years:
 - (1) The results of control device monitoring required under 40 CFR63.466.
 - (2) Information on the actions taken to comply with 40 CFR63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
 - (3) Estimates of annual solvent consumption for each solvent cleaning machine.

If carbon adsorber is used to comply with the standards:

(4) If a carbon adsorber is used to comply with these standards, records of the date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in 40 CFR63.466.

D.8.10 Reporting Requirements

A summary of the information to document compliance with Conditions D.8.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, and to the following address:

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (a) Submit an initial notification report immediately. The report shall include the following information:
 - (1) The name and address of the owner or operator.
 - (2) The address of the solvent cleaning machine.
 - (3) A brief description of each solvent cleaning machine including machine type, solvent/air interface area, and existing controls.
 - (4) The date of installation for the solvent cleaning machine.
 - (5) The anticipated compliance approach for the solvent cleaning machine.
 - (6) An estimated annual halogenated HAP solvent consumption for the solvent cleaning machine.
- (b) Submit an initial statement of compliance for the solvent cleaning machine no later than 150 days after the start up date. This statement shall include:
 - (1) The name and the address of the owner or operator.
 - (2) The address (i.e., physical location) of the solvent cleaning machine(s).

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- (3) A list of the control equipment used to achieve compliance for solvent cleaning machine.
- (4) For each piece of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date.

If a reduced room draft is used to comply with standards:

(5) Conditions to maintain the wind speed requirements of 40 CFR63.463(e)(2)(ii), if applicable.

If the Permittee will employ idling emission limit standards of 40 CFR63.463 (b)(1)(ii)and (b)(2)(ii):

- (6) The Permittee shall submit a test report for tests of idling emissions meeting the specifications in Method 307 of Appendix 40 CFR 63, Subpart T. This report shall comply with the following requirements:
 - (A) The test must be on the same specific model cleaner used at the source. The test can be done by the Permittee of the affected machine or can be supplied by the vendor of that solvent cleaning machine or a third party.
 - (B) The report must clearly state the monitoring parameters, monitoring frequency and the delineation of exceedances for each parameter.
 - (C) If a solvent cleaning machine vendor or third party test report is used to demonstrate compliance, it shall include the following for the solvent cleaning machine tested: Name of the person(s) or company that performed the test, model name, the date the solvent cleaning machine was tested, serial number, and a diagram of the solvent cleaning machine tested.
 - (D) If a solvent cleaning machine vendor or third party test report is used, the Permittee shall comply with the following requirement:
 - (i) Submit a statement by the solvent cleaning machine vendor that the unit tested is the same as the unit the report is being submitted for.

OR

(i) Demonstrate to the commissioner=s satisfaction that the solvent emissions from the solvent cleaning machine for which the test report is being submitted are equal to or less than the solvent emissions from the solvent cleaning machine in the vendor test report.

If a carbon adsorber is used to comply with the standards:

- (7) The date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in 40 CFR63.466(e).
- (c) The Permittee shall submit an annual report by February 1 of each year following the one for which the reporting is being made. This report shall include the requirements as follows:
 - (1) A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR63.463(d)(10)."

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- (2) An estimate of solvent consumption for each solvent cleaning machine during the reporting period.
- (d) The Permittee shall submit an exceedance report to the commissioner semiannually except when, the commissioner determines, on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph 40 CFR63.468 (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calender half or quarter, as appropriate. The exceedance report shall include the applicable information as given below:
 - (1) Information on the actions taken to comply with 40 CFR63. 463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
 - (2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
 - (3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
- (e) That pursuant to 40 CFR63.463 (i), the Permittee who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions are met:
 - (1) The source has demonstrated a full year of compliance without an exceedance.
 - (2) The Permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in Subpart A (General Provisions) and in 40 CFR 63, Subpart T
 - (3) The commissioner does not object to a reduced frequency of reporting for the affected source as provided in paragraphs (e)(3)(iii) of Subpart A (General Provisions) of 40 CFR 63.
- (f) The Permittee of a solvent cleaning machine requesting an equivalency determination, as described in 40 CFR63.469 shall submit an equivalency request report to the commissioner and receive an approval prior to startup.

Naval Surface Warfare Center - Crane Division

SECTION D.9

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FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(i) One (1) Vapor Degreaser, identified as CRN-0106-03-23-HH13, located in Building 106, with a maximum Natural Orange usage of 0.5 gallons per day, equipped with cooling/condensing coils and a cover to control VOC emissions, and exhausting to stack CRN-0106-03-23-HH13-S.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Open Top Vapor Degreaser Operations [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreaser Operations), the Permittee shall:

- (1) equip the vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
- (2) keep the cover closed at all times except when processing work loads through the degreaser;
- (3) minimize solvent carry-out by:
 - (a) Racking parts to allow complete drainage;
 - (b) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;
 - (c) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (d) Tipping out any pools of solvent on the cleaned parts before removal;
 - (e) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
- (4) not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
- (5) not occupy more than half of the degreaser's open top area with the workload;
- (6) not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
- (7) never spray above the vapor level;
- (8) repair solvent leaks immediately, or shut down the degreaser;
- (9) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (10) not use workplace fans near the degreaser opening;
- (11) not allow visually detectable water in the solvent exiting the water separator; and
- (12) provide a permanent, conspicuous label summarizing the operating requirements.

D.9.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.9.3 VOC Emissions

The cover for VOC control shall be in place at all times the degreaser is not in operation.

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SECTION D.10

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Mixing and pouring equipment in Building 200 used as a plastic bonded explosive line, (j) constructed in 1984, consisting of mixing and pouring operations, using a carbon adsorption system with a wet scrubber to control particulate matter emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the mixing and pouring equipment shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.10.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.10.3 Particulate Matter (PM)

The scrubber shall be operated at all times when the mixing and pouring operations is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.10.4 Visible Emissions Notations

- Visible emission notations of the wet scrubber stack exhaust from the mixing and pouring (a) operations shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- For processes operated continuously, "normal" means those conditions prevailing, or (b) expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- In the case of batch or discontinuous operations, readings shall be taken during that part (c) of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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D.10.5 Scrubber Operating Condition

- (a) The Permittee shall monitor and record the pressure drop of the scrubber once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 2 and 8 inches of water. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop and flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the pressure drop shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (c) The gauge employed to take the pressure drop across the scrubber or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 2% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.6 Record Keeping Requirements

- (a) To document compliance with Condition D.10.4, the Permittee shall maintain records of visible emission notations of the wet scrubber stack exhaust from the mixing and pouring operations.
- (b) To document compliance with Condition D.10.5, the Permittee shall maintain the following:
 - (1) All parametric monitoring readings; and
 - (2) Records of the results of the inspections required under Condition D.10.5; and
 - (3) All response steps taken and the outcome for each.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.11

Crane, Indiana

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (k) Explosive Bomb Loading Operation, constructed in 1987, consisting of:
 - (1) screening and weighing aluminum powder in Building 2714, using a baghouse for particulate control; and
 - screening and weighing TNT in Building 153, using a wet scrubber for particulate (2) control; and
 - melting and mixing aluminum powder and TNT in Building 152, using a wet scrubber (3)for particulate control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the explosive bomb loading operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.11.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.11.3 Particulate Matter (PM)

The baghouse and wet scrubbers for PM control shall be in operation at all times the explosive bomb loading operations are in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.11.4 Visible Emissions Notations

- Visible emission notations of the baghouse and wet scrubber stack exhausts from the explosive bomb loading operations shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- For processes operated continuously, "normal" means those conditions prevailing, or (b) expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.11.5 Scrubber Operating Condition

- (a) The Permittee shall monitor and record the pressure drop of the scrubber once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 2 and 8 inches of water. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop and flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the pressure drop shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (c) The gauge employed to take the pressure drop across the scrubber or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 2% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.11.6 Record Keeping Requirements

- (a) To document compliance with Condition D.11.4, the Permittee shall maintain records of visible emission notations of the baghouse and wet scrubber stack exhaust from the explosive bomb loading operations.
- (b) To document compliance with Condition D.11.5, the Permittee shall maintain the following:
 - (1) All parametric monitoring readings; and
 - (2) Records of the results of the inspections required under Condition D.11.5; and
 - (3) All response steps taken and the outcome for each.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(I) One natural gas-fired rotary kiln furnace in Building 69, used for white phosphorous conversion to phosphoric acid, constructed in 1983 and using a variable throat venturi scrubber to control particulate matter emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the rotary kiln furnace shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.12.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.12.3 Particulate Matter (PM)

The variable throat venturi scrubber for PM control shall be in operation at all times when the rotary kiln furnace is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.12.4 Visible Emissions Notations

- (a) Visible emission notations of the variable throat venturi scrubber stack exhaust from the rotary kiln furnace shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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D.12.5 Scrubber Operating Condition

- (a) The Permittee shall monitor and record the pressure drop of the scrubber once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 2 and 8 inches of water. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop and flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the pressure drop shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (c) The gauge employed to take the pressure drop across the scrubber or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 2% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.12.6 Record Keeping Requirements

- (a) To document compliance with Condition D.12.4, the Permittee shall maintain records of once per shift visible emission notations of the variable throat venturi scrubber stack exhaust from the rotary kiln furnace.
- (b) To document compliance with Condition D.12.5, the Permittee shall maintain the following:
 - (1) All parametric monitoring readings; and
 - (2) Records of the results of the inspections required under Condition D.12.5; and
 - (3) All response steps taken and the outcome for each.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.13

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (m) Service Station (Gasoline/Diesel Dispensing), identified as CRN-3280-04-17-X23, located in Building 3280, with a maximum usage of 350,000 gallons of unleaded gasoline per year; and 350,000 gallons of diesel per year.
 - (1) Two (2) Above ground vertical fixed-roof cone tanks, storing unleaded gasoline, constructed in 1995, identified as:
 - (a) CRN-3280-01-17-X23, located in Building 3280, with a maximum capacity of 11,600 gallons (43.9 m³), and equipped with a vapor recovery system of 99.9+% removal efficiency;
 - (b) CRN-3280-02-17-X23, located in Building 3280, with a maximum capacity of 11,600 gallons (43.9 m³), and equipped with a vapor recovery system of 99.9+% removal efficiency.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.13.1 Gasoline Dispensing Facilities [326 IAC 8-4-6]

Pursuant to 326 IAC 8-4-6 (Gasoline Dispensing Facilities),

- (a) No Permittee shall allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:
 - (1) A submerged fill pipe.
 - (2) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
 - (3) A vapor balance system connected between the tank and the transport, operating according to manufacturer's specifications.
- (b) If the owner or the employees of the owner are not present during loading, it shall be the responsibility of the owner or the operator of the transport to make certain the vapor balance system is connected between the transport and the storage tank and is operating according to manufacturer's specifications.

D.13.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.13.3 Testing Requirements [326 IAC 8-4-6(I)]

The Permittee is required to retest all vapor collection and control systems for vapor leakage and blockage, and successfully pass the test, at least every five (5) years or upon major system modification is considered to be replacing, repairing, or upgrading seventy-five percent (75%) or more of vapor collection and control system of the facility.

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Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.13.4 Record Keeping Requirements

- (a) Within forty-five (45) days after the installation of the vapor collection and control system, the Permittee shall submit to the agency a registration form which shall be provided by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), which provides, at a minimum, the following:
 - (1) The name, address, and telephone number of the facility.
 - (2) The signature of the Permittee.
 - (3) The CARB executive order number for the vapor collection and control system to be utilized.
 - (4) The number of nozzles, excluding diesel and kerosene, used for motor vehicle refueling.
 - (5) The monthly average volume of motor vehicle fuel dispensed.
 - (6) The date of completion of installation of the vapor collection and control system. Completion of installation includes the successful passing of a vapor leakage and blockage test. The vapor leakage and blockage test must, at a minimum, include the following:
 - (A) A pressure decay or leak test.
 - (B) A dynamic pressure drop test.
 - (C) A liquid blockage test.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.13.5 Reporting Requirements

The results of the tests listed in Condition D.13.4(a)(6) must be submitted with the registration form specified in Condition D.13.4(a).

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SECTION D.14

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (n) Testing of Fuses, Boosters, and other Explosive Devices
 - (1) One (1) containment chamber in Building 2167, constructed in 1986, used to test burn pyrotechnic items.
 - One (1) test cell in Building 3235, constructed in 1991, used to test lithium batteries, using a vertical packed-bed tower to control particulate matter emissions.
 - (3) One (1) containment chamber in Building 142, constructed in 1995, used to test detonation of fuses, boosters and other explosive devices, using a baghouse to control particulate matter emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.14.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the testing of fuses, boosters and other explosive devises shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.14.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.14.3 Particulate Matter (PM)

The vertical packed bed tower and baghouse for PM control shall be in operation at all times when the testing operations are in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.14.4 Visible Emissions Notations

- (a) Visible emission notations of the vertical packed-bed tower and baghouse stack exhausts from the testing operations shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.14.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the containment chamber in Building 142, at least once per shift when the abrasive blasting units are in operation and venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2 .0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.14.6 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the containment chamber when venting to the atmosphere. An inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.14.7 Vertical Packed-Bed Tower Inspections

An inspection shall be performed each calendar quarter of the vertical packed-bell tower controlling the testing processes when venting to the atmosphere. All defective equipment shall be replaced or repaired.

D.14.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.14.9 Vertical Packed-Bed Tower Failure Detection

In the event that vertical packed-bed tower failure has been observed:

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Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.14.10 Record Keeping Requirements

- To document compliance with Condition D.14.4, the Permittee shall maintain records of (a) once per shift visible emission notations of the vertical packed-bed tower and baghouse stack exhausts from the testing of fuses, boosters and other explosive devises.
- To document compliance with Condition D.14.5, the Permittee shall maintain the (b) following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Conditions D.14.6 and D.14.7, the Permittee shall maintain records of the results of the inspections required under Conditions D.14.6 and D.14.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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SECTION D.15

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Eighteen (18) autoclaves and one (1) belt flaker located in in Building 160, used for the (o) demilitarization of 750 pound bombs, with a combined maximum capacity of 2,000 lbs/hr, using six (6) wet scrubbers to control particulate matter emissions.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.15.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the demilitarization process shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.15.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.15.3 Particulate Matter (PM)

The wet scrubbers for PM control shall be in operation at all times the autoclaves and belt flaker are in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.15.4 Visible Emissions Notations

- Visible emission notations of the wet scrubbers stack exhausts from the autoclaves and (a) belt flakershall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- For processes operated continuously, "normal" means those conditions prevailing, or (b) expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- In the case of batch or discontinuous operations, readings shall be taken during that part (c) of the operation that would normally be expected to cause the greatest emissions.
- A trained employee is an employee who has worked at the plant at least one (1) month (d) and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

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D.15.5 Scrubber Operating Condition

- (a) The Permittee shall monitor and record the pressure drop of the scrubber once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 2 to 8 inches of water. The Compliance Response Plan for the scrubber shall contain troubleshooting contingency and response steps for when the pressure drop and flow rate readings are outside of the normal range for any one reading.
- (b) The instruments used for determining the pressure drop shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- The gauge employed to take the pressure drop across the scrubber or any part of the (c) facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within + 2% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.
- (d) An inspection shall be performed each calendar quarter of the scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.15.6 Record Keeping Requirements

- To document compliance with Condition D.15.4, the Permittee shall maintain records of (a) visible emission notations of the wet scrubbers stack exhausts from the autoclaves and belt flaker.
- (b) To document compliance with Condition D.15.5, the Permittee shall maintain the following:
 - All parametric monitoring readings; and (1)
 - (2) Records of the results of the inspections required under Condition D.15.5; and
 - (3) All response steps taken and the outcome for each.
- All records shall be maintained in accordance with Section C General Record Keeping (c) Requirements, of this permit.

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FACILITY OPERATION CONDITIONS

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SECTION D.16

Facility Description [326 IAC 2-7-5(15)]:

(p) One (1) C-4 extruder process line, located in Building 2172, with a maximum manufacturing capacity of forty (40) 1.2 pound C-4 blocks per minute.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.16.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

D.16.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.16.3 Visible Emissions Notations

- (a) Visible emission notations of the extruder stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.16.4 Record Keeping Requirements

- (a) To document compliance with Condition D.16.3, the Permittee shall maintain records of visible emission notations of the extruder stack exhaust.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.17

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities:

- (45)Six (6) Underground storage tanks, identified as:
 - CRN-0003-02-17-U21, located in Building 3; (a)
 - (b) CRN-2737-06-12-M41, located in Building 2737;
 - CRN-2737-07-12-M41, located in Building 2737; (c)
 - CRN-3149-02-16-DD12, located in Building 3149; (d)
 - CRN-2984-02-17-W22, located in Building 2984; and (e)
 - CRN-2984-03-17-W22, located in Building 2984. (f)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 CFR 60, Subpart Kb]

D.17.1 Record Keeping Requirements [40 CFR 60, Subpart Kb]

Pursuant to 40 CFR 60.116b (Monitoring of operations), the Permittee shall keep readily accessible records showing the dimension and an analysis showing the capacity of the following underground storage tanks:

- (1) CRN-0003-02-17-U21, located in Building 3; and
- CRN-3149-02-16-DD12, located in Building 3149; and (2)
- CRN-2737-06-12-M41, located in Building 2737; and (3)
- CRN-2737-07-12-M41, located in Building 2737. (4)

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SECTION D.18

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities:

- Fuel oil-fired combustion sources with heat input less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
 - (A) 1.63 mmBtu fuel oil-fired boiler, constructed in July 1983, located in Building 74.
 - (B) 0.275 mmBtu/hr fuel oil-fired boiler, constructed in September 1990, located in Building 2918.
 - Two (2) 1.3 mmBtu/hr natural gas/fuel oil-fired boilers, identified as Cleaver Brooks (C) CRN-0180-01-17-W22 and CRN-0180-02-17-W22, constructed in 1999, located in Building 180.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.18.1 Particulate Matter Emissions Limitations [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from the 1.63 mmBtu/hr fuel oil-fired boiler which was existing and in operation prior to September 21, 1983 and located in Building 74 shall not exceed 3.34 pound per million Btu heat input (lb/mmBtu) from each boiler.

This limitation was calculated using the following equation:

Pt =
$$\frac{(C) (a) (h)}{76.5 (Q^{0.75}) (N^{0.25})}$$

Where $C = 50 \mu/m^3$

Q = total source capacity (lbs/mmBtu)

N = number of stacks

a = 0.67

h = average stack height (feet)

Pt = pounds of particulate matter emitted per million Btu heat input (lb/mmBtu)

D.18.2 Particulate Matter Emissions Limitations [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions Limitations), particulate emissions from the 0.275 mmBtu/hr fuel-oil fired boiler constructed after September 21, 1983 and located in Building 2918 shall not exceed 0.736 pound per million Btu heat input (lb/mmBtu) from each boiler.

This limitation was calculated using the following equation:

$$Pt = 1.09$$

Where:

Pt = pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

D.18.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

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SECTION D.19

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities:

- (1)Natural gas-fired combustion sources with heat input less than ten million (10,000,000) Btu per hour:
 - (A) Natural gas-fired boilers, existing and in operation before September 21, 1983, located in the following buildings:
 - (i) one boiler in each of the following buildings: 1, 2, 4, 12, 14, 17, 18, 38, 45, 181, 224, 300, 479, 1817, 1909, 2037, 2038, 2044, 2059, 2074, 2088, 2167, 2506, 2516, 2682, 2693, 2701, 2720, 2721, 2748, 2749, 2889, 2931, 2964, 2987, 2993, 3006
 - (ii) two boilers in each of the following buildings: 7, 2521
 - (B) Natural gas-fired boilers, constructed after September 21, 1983, located in the following buildings:
 - one boiler in each of the following buildings: 5, 8, 10, 34, 36, 37, 40, 47, 66, (i) 77, 105, 128, 363, 365, 366, 966, 1141, 1149, 2036, 2041, 2045, 2694, 2807, 2921, 3109, 3149, 3168, 3173, 3188, 3234, 3235, 3239, 3243, 3250
 - two boilers in each of the following buildings: 39, 180, 364, 2035, 2674, 2906 (ii)
 - (iii) four boilers in each of the following buildings: 3241, 3251

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.19.1 Particulate Matter Emissions Limitations [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (Particulate Matter Emissions for Sources of Indirect Heating). the PM emissions from the boilers listed in subsection (1) above which were existing and in operation prior to September 21, 1983 shall not exceed the pound per million Btu heat input (lb/mmBtu) using the following equation from each boiler.

Pt =
$$\frac{\text{(C) (a) (h)}}{76.5 \text{ (Q}^{0.75}\text{) (N}^{0.25}\text{)}}$$
 Where C = 50 µ/m^3 Q = total source capacity (lbs/mmBtu)

N = number of stacks

a = 0.67

h = average stack height (feet)

Pt = pounds of particulate matter emitted per million Btu heat input (lb/mmBtu)

- Pursuant to 326 IAC 6-2-3(d), particulate emissions from all boilers existing and in (b) operation on or before June 8, 1972, shall in no case exceed 0.8 lb/mmBtu heat input.
- Pursuant to 326 IAC 6-2-3(e), particulate emissions from all boilers which began (c) operation after June 8, 1972, shall in no case exceed 0.6 lb/mmBtu heat input.

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D.19.2 Particulate Matter Emissions Limitations [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions Limitations), particulate emissions from the boilers listed in subsection (2) above which were constructed after September 21, 1983 shall not exceed the pound per million Btu heat input (lb/mmBtu) using the following equation from each boiler.

Pt = 1.09

Where:

Pt = pounds of particulate matter emitted per million

Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

D.19.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

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SECTION D.20

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities:

One (1) incinerator used for the destruction of classified materials, located in Building 45.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-7-5(1)]

D.20.1 Incinerator Requirements [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2 (Incinerator Requirements), the incinerator shall:

- (1) consist of primary and secondary chambers or the equivalent;
- (2) be equipped with a primary burner unless burning wood products;
- (3) comply with 326 IAC 5-1 and 326 IAC 2;
- (4) be maintained properly as specified by the manufacturer and approved by the Commissioner:
- (5) be operated according to the manufacturer's recommendations and only burn waste approved by the Commissioner;
- (6) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- (7) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;
- (8) not emit particulate matter in excess of:
 - (a) incinerators with a maximum refuse-burning capacity of two hundred (200) or more pounds per hour: three-tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; or
 - (b) all other incinerators: five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- (9) not create a nuisance or a fire hazard.

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SECTION D.21

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

One (1) contained detonation chamber, identified as P01, located in building 3339, with a (q) maximum capacity of 7500 pounds per hour gross weight of munitions, 750 pounds per hour net explosive weight (NEW), equipped with one (1) baghouse for particulate control, and exhausting to stack S01.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.21.1 PSD Minor Net Emission Increase Limit [326 IAC 2-2][40 CFR 52.21]

This input to the CDC shall not exceed 1,700 tons of net explosive weight per consecutive twelve (12) month period. This throughput limit is required to limit the potential to emit of carbon monoxide (CO) to 96.56 tons per year and the NOx emissions to less than 14.45 tons per year. These limits, together with the limits on the Mobile Plasma Treatment System (MPTS) in Condition D.22.1 are required to limit the potential of to emit of CO and NOx to less than 100 tons and 40 tons, respectively, per twelve (12) consecutive month period. This limit will also limit the potential to emit of PM and PM10 to less than twenty five (25) and fifteen (15) tons per consecutive twelve (12) month period, respectively. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.21.2 RCRA Air Standards and Limitations

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 30004(n) of RCRA, as amended by HSWA.

D.21.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the contained detonation chamber shall not exceed 2.12 pounds per hour when operating at a process weight rate of 750 pounds per hour based on net explosive weight.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.21.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its baghouse.

Compliance Determination Requirements

D.21.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period within 60 days after achieving maximum operating rate, but no more than 180 days after initial start-up, in order to demonstrate compliance with Conditions D.21.1 and D.21.3, the Permittee shall test for CO, PM, and PM₁₀ on the baghouse to this unit utilizing methods as approved by the Commissioner. PM₁₀ includes filterable and condensible PM₁₀. Testing shall be conducted in accordance with Section C - Performance Testing.

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D.21.6 Particulate Matter (PM)

In order to comply with Condition D.21.3, the baghouse for PM control shall be in operation and control emissions from the contained detonation chamber at all times that the contained detonation chamber is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.21.7 Visible Emissions Notations

- Visible emission notations of the CDC baghouse stack exhaust shall be performed once (a) per shift during normal daylight operations when the CDC is in operation. A trained employee shall record whether emissions are normal or abnormal.
- For processes operated continuously, "normal" means those conditions prevailing, or (b) expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- In the case of batch or discontinuous operations, readings shall be taken during that part (c) of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.21.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the contained detonation chamber, at least once per shift when the contained detonation chamber is in operation. When for any one reading, the the pressure drop across the baghouse is outside the normal range of 1.0 and 4.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.21.9 Baghouse Inspections

An inspection shall be performed with the last month of each calendar quarter of all cartridges controlling the contained detonation chamber operation when venting to the atmosphere. All defective cartridges shall be replaced or repaired.

D.21.10 Broken or Failed Baghouse Cartridge Detection

In the event that a baghouse cartridge failure has been observed:

The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this Permit Reviewer: Kimberly Paurazas

permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.21.11 Record Keeping Requirements

- (a) To document compliance with Condition D.21.7, the Permittee shall maintain records of once per shift visible emission notations of the contained detonation chamber baghouse stack exhaust.
- (b) To document compliance with Condition D.21.8, the Permittee shall maintain:
 - (1) Once per shift records of the following operational parameters during normal operation:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) To document compliance with Condition D.21.9, the Permittee shall maintain the records of the results from the quarterly baghouse inspection.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.21.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.21.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.22 FACILITY OPERATION CONDITIONS - Mobile Plasma Treatment System

Facility Description [326 IAC 2-7-5(15)]:

- One (1) mobile plasma treatment system (MPTS), identified as P02, located near Building 69, (r) with a maximum capacity of 3600 pounds per hour gross weight of explosives, 500 pounds per hour net explosive weight (NEW), equipped with one (1) afterburner for VOC and CO control, one (1) semi-dry scrubber for HCl and PM control, and one (1) Selective Catalytic Reduction (SCR) unit for NO, control and exhausting at stack S02. The semi-dry scrubber is composed of an evaporative cooler, sodium bicarbonate injection, and a pulse-jet baghouse.
- One (1) diesel-fueled, 4160-volt, 1000 kW generator which powers the MPTS exhausting at (s) stack S03.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.22.1 PSD Minor Net Emission Increase Limit [326 IAC 2-2][40 CFR 52.21]

The MPTS shall be limited to 1800 hours per year and the total amount of diesel fuel used in the generator engine shall be limited to 89,604 gallons per twelve (12) consecutive month period. This will limit the NOx emissions from the MPTS (with generator) to less than 25.41 tons per year and the CO emissions to less than 2.91 tons per year. These limits, together with the limits on the CDC in Condition D.21.1, are required to limit the potential to emit of NOx and CO to less than 40 tons and 100 tons, respectively, per twelve (12) consecutive month period. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.22.2 RCRA Air Standards and Limitations

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated under the provisions of Section 30004(n) of RCRA, as amended by HSWA.

D.22.3 Incinerator Requirements [326 IAC 4-2]

Pursuant to 326 IAC 4-2, the incinerator shall:

- Consist of primary and secondary chambers or the equivalent; (a)
- (b) Be equipped with a primary burner unless burning wood products;
- Comply with 326 IAC 5-1 and 326 IAC 2; (c)
- (d) Be maintained properly as specified by the manufacturer and approved by the commissioner:
- Be operated according to the manufacturer's recommendations and only burn waste (e) approved by the commissioner;
- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- Be operated so that emissions of hazardous material including but not limited to viable (g) pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;

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(h) Not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard condition corrected to fifty percent (50%) excess air; and

(i) Not create a nuisance or fire hazard.

If any of the above result, the burning shall be terminated immediately.

D.22.4 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the MPTS as described in this section except when otherwise specified in 40 CFR 63, Subpart EEE.

D.22.5 NESHAP Emissions Limitation [40 CFR 63.1203(b), Subpart EEE]

The following emission limits apply:

- (a) Dioxin/Furan emissions shall not exceed 0.20 nanograms toxicity equivalent (TEQ) per dry standard cubic meter corrected to seven percent oxygen.
- (b) Mercury emissions shall not exceed 45 micrograms per dry standard cubic meter corrected to seven percent oxygen.
- (c) Lead and cadmium combined emissions shall not exceed 120 micrograms per dry standard cubic meter corrected to seven percent oxygen.
- (d) Arsenic, beryllium, and chromium combined emissions shall not exceed 97 micrograms per dry standard cubic meter corrected to seven percent oxygen.
- (e) Carbon monoxide and hydrocarbon emissions shall comply with either (1) or (2) below:
 - (1) Hydrocarbons in the main stack shall not exceed 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to seven percent oxygen, and reported as propane; or
 - (2) Carbon monoxide in the main stack shall not exceed 100 parts per million by volume, over an hourly rolling average monitored continuously with a continuous emissions monitoring system (CEMS), dry basis and corrected to seven percent oxygen; and in addition, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by 40 CFR 63.1206(b)(7), hydrocarbons shall not exceed 10 parts per million by volume over an hourly rolling average (monitoring continuously with a CEMS), dry basis, corrected to seven percent oxygen, and reported as propane.
- (f) Hydrochloric acid and chlorine gas combined emissions shall not exceed 21 parts per million by volume, expressed as hydrochloric acid equivalents, dry basis, corrected to seven percent oxygen.
- (g) Particulate matter (PM) emissions shall not exceed 34 milligrams per dry standard cubic meter.
- (h) When hazardous waste is not in the plasma chamber and the Permittee has documented in the operating record that the source is complying with all other applicable requirements of this permit, 40 CFR Subpart EEE shall not apply except for the notification, reporting, and record requirements of sections 63.1203 through 63.1205; the monitoring and compliance standards of this section and sections 63.1207 through

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63.1209, except the modes of operation requirements of section 63.1209(g); and the notification, reporting, and recordkeeping requirements of sections 63.1210 through

63.1212.

D.22.6 Destruction and Removal Efficiency Standard [40 CFR 63.1203(c), Subpart EEE]

- The Permittee shall specify one or more principle organic hazardous constituents (POHCs) from the list of HAPs for each waste to be burned based on the degree of difficulty of treating that constituent and on its concentration or mass in the feed.
- (b) The Permittee shall achieve a destruction and removal efficiency (DRE) of 99.99% for each POHC. DRE shall be calculated using the equation:

DRE =
$$[1 - W_{out}/W_{in}] \times 100\%$$

Where:

W_{in} = mass feedrate of one POHC in a waste feedstream; and W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere

D.22.7 Automatic Waste Feed Cutoff (AWFCO) [40 CFR 63.1206(c)(3), Subpart EEE]

The Permittee shall operate the MPTS with a functioning system that immediately and automatically cuts off the hazardous waste feed, except during a ramp down procedure under the following conditions:

- When any of the following are exceeded: (a)
 - (1) Operating parameter limits specified under Condition D.22.15.
 - (2) an emission standard monitored by a CEMS, or
 - (3) the allowable plasma chamber pressure.
- (b) When the span value of any CMS detector, except a CEMS, is met or exceeded;
- Upon malfunction of a CMS monitoring an operating parameter limit specified under (c) Condition D.22.15 or an emission level; or
- (d) When any component of the automatic waste feed cutoff system fails.

D.22.8 Establishing Feedrate Limits [40 CFR 63.1209]

- In order to demonstrate compliance with the destruction and removal efficiency of Condition D.22.6 and the standards of Condition D.22.5, the Permittee must establish limits on the maximum pumpable and total (i.e., pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed. These limits must be established as the average of the maximum hourly rolling averages for each run. The Permittee must also establish a 12-hour rolling average limit for the feedrate of mercury, semivolatile and low volatile metals, chlorine and chlorides. [63.1209(j)(3), (k)(4), (l)(1), (n)(2), (o)(1)
- (b) Prior to feeding the material, the Permittee must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits.
 - (1) The Permittee must develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify the parameters for which the Permittee will analyze each feedstream to ensure compliance with the operating parameter limits.

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(2) The Permittee must submit the feedstream analysis plan to IDEM, OAQ for review and approval, if requested [63.1209(c)]

D.22.9 Plasma Chamber Leaks [40 CFR 63.1206(c)(5), Subpart EEE]

- (a) The Permittee shall control plasma chamber leaks by:
 - (1) keeping the combustion zone sealed, or
 - (2) maintaining the maximum combustion zone pressure lower than ambient pressure using an instantaneous monitor.
- (b) The leak control method must be specified in the operating record.

D.22.10 Operator Training and Certification [40 CFR 63.1206(c)(6), Subpart EEE]

- (a) The Permittee shall establish training programs for all categories of personnel whose activities may reasonably be expected to directly affect emissions.
 - (1) The Permittee shall ensure that the MPTS is operated and maintained at all times by persons who are trained and certified to perform these duties.
 - (2) A certified control room operator must be on duty at the site at all times the source is in operation. A hazardous waste incinerator control room operator must:
 - (A) Be trained and certified under a site-specific, source-developed and implemented program that meets the requirements of paragraph §63.1206(c)(6)(v); or
 - (B) Be trained under the requirements of, and certified under, the American Society of Mechanical Engineers Standard Number QHO-1-1994 and QHO-la-1996 Addenda: or
 - (C) Be trained and certified under a state program.
 - (3) To maintain control room operator qualification under a site-specific, source developed and implemented training program as provided by paragraph §63.1206(c)(6)(v), control room operators must complete an annual review or refresher course.
 - (4) The Permittee shall record the operator training and certification program in the operating record.

D.22.11 Operation and Maintenance [326 IAC 2-7-5(13)][40 CFR 63.1206(c)(7), Subpart EEE]

- (a) The Permittee must prepare and at all times operate according to an operation and maintenance plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the MPTS, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.
- (b) The plan must prescribe how the MPTS will be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels achieved during the comprehensive performance test.
- (c) This plan ensures compliance with the operation and maintenance requirements of §63.6(e) and minimizes emissions of pollutants, automatic waste feed cutoffs, and malfunctions.

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(d) The operating and maintenance plan must include a corrective measures plan that specifies the procedures the Permittee will follow in the case of a bag leak detection system alarm. The corrective measures plan must include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective measures taken to correct the control device malfunction or minimize emissions as specified below. Failure to initiate the corrective measures required by this paragraph is failure to ensure compliance with the emission standards.

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(e) The Permittee must record the plan in the operating record.

D.22.12 Broken or Failed Bag Detection [40CFR 63.1206(c) (7)(ii)(D)]

The Permittee must continuously operate a bag leak detection system that meets the specifications and requirements below and must comply with the corrective measures requirements of paragraph §63.1206(c)(7)(ii)(B):

- (a) The bag leak detection system must be certified by the manufacturer to be capable of continuously detecting and recording particulate matter emissions at concentrations of 1.0 milligram per actual cubic meter, unless it is demonstrated, pursuant to §63.1209(a)(1), that a higher sensitivity would adequately detect bag leaks;
- (b) The bag leak detection system sensor must provide output of relative particulate matter loadings;
- (c) The bag leak detection system must be equipped with an alarm system that will sound an audible alarm when an increase in relative particulate loadings is detected over a preset level;
- (d) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system;
- (e) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time;
- (f) Following initial adjustment, the Permittee must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except where detailed in the Operation and Maintenance Plan. The Permittee must not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition;
- (g) For negative pressure or induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector shall be installed downstream of the baghouse and upstream of any wet acid gas scrubber; and
- (h) Where multiple detectors are required, the system's instrumentation and alarm system may be shared among the detectors.

Compliance Determination Requirements

D.22.13 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1-3(i)(8)] [326 IAC 2-1.1-11] [40 CFR 63.1207, Subpart EEE]

(a) No later than six months after the MPTS begins operation, the Permittee shall demonstrate initial compliance with the emission limits established in Condition D.22.5 by

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commencing initial comprehensive performance tests in accordance with 40 CFR 63.1207 and Section C - Performance Testing. These tests shall also establish limits for the operating parameters as provided in 40 CFR 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems (CMS). The testing must be completed within 60 days after the date of commencement. Comprehensive performance tests shall be repeated at least once every 61 months from the date of the most recent valid compliance demonstration. Based on the results of previous stack tests, IDEM may, at its discretion, allow the Permittee to skip one test cycle.

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- (b) The Permittee shall commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test. The testing must be completed within 60 days after the date of commencement. Confirmatory performance tests are conducted to:
 - (1) Demonstrate compliance with the dioxin/furan emission standard when the source operates under normal operating conditions; and
 - (2) Conduct a performance evaluation of continuous monitoring systems required for compliance assurance with the dioxin/furan emission standard under §63.1209(k).
- (c) Pursuant to 326 IAC 3-6-3(b)(2), 40 CFR 63.7(e) and 40 CFR 63.1207(g), the tests shall be conducted under representative operating conditions.
- (d) Pursuant to 326 IAC 3-6-3(b), during the performance tests, the MPTS must be operating at 95 percent of its maximum production capacity or more, or under other capacities or conditions specified and approved by IDEM, to be considered a valid test.
- (e) The Permittee shall submit a site-specific test plan meeting the requirements of 40 CFR 63.1207(f) to the IDEM, OAQ at least:
 - (1) one year before a comprehensive performance test, and
 - (2) at least 60 days before a confirmatory performance test.
- (f) The Permittee must establish separate semivolatile metal, low volatile metal, mercury, and total chlorine (organic and inorganic), and/or ash feedrate limits for each feedstream for which the comprehensive performance test feedstream analysis determines that these constituents are not present at detectable levels.
- (g) Testing shall be conducted in accordance with Section C Performance Testing.

D.22.14 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart A]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2 and 40 CFR 63, Subpart EEE, a CEMS shall be installed, calibrated, maintained, and continuously operated pursuant to 326 IAC 3-5. The CEMS shall be installed and operational prior to conducting the performance tests required in Condition D.22.13. The CEMS shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c).
- (b) Pursuant to 40 CFR 63, Subpart EEE, a CEMS shall be installed, calibrated, maintained, and operated to demonstrate compliance with the carbon monoxide and hydrocarbon limits specified in 40 CFR 63 and Condition D.22.5. An oxygen CEMS shall also be installed, calibrated, maintained, and operated to continuously correct the carbon monoxide and hydrocarbon levels to 7 percent oxygen. [63.1209(a)(1)(i)]

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(c) The Permittee must install, calibrate, maintain, and operate a particulate matter CEMS to demonstrate and monitor compliance with the particulate matter standards under Condition D.22.5(g). However, compliance with the requirement to install, calibrate, maintain and operate the PM CEMS in not required until such time that the EPA promulgates all performance specifications and operational requirements applicable to PM CEMS. [63.1209(a)(1)(iii)]

D.22.15 Monitoring [40 CFR 63.1209]

- (a) To comply with the applicable feedrate limits established in Condition D.22.8, the Permittee must monitor and record feedrates as follows:
 - (1) Determine and record the value of the parameter for each feedstream by sampling and analysis or other method;
 - (2) Determine and record the mass or volume flowrate of each feedstream by a CMS. If the Permittee determines the flowrate of a feedstream by volume, the Permittee must determine and record the density of the feedstream by sampling and analysis (unless the constituent concentration in units of weight per unit volume (e.g.,mg/l) is reported); and
 - (3) Calculate and record the mass feedrate of the parameter per unit time.
- (b) In order to demonstrate compliance with the destruction and removal efficiency standard of Condition D.22.6 and the emission standards of Condition D.22.5(a) for dioxins and furans, the Permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The Permittee must document the temperature measurement location in the test plan. The limits must be established as minimum hourly rolling average limits as the average of the test run averages. [§63.1209(j)(1) and (k)(2)]
- (c) In order to demonstrate compliance with the destruction and removal efficiency standard of D.22.6 and the emission standards of D.22.5(a), (c), (d), (f) and (g) for dioxin and furans, semivolatile and low volatile metals, and hydrochloric acid and chlorine gas, the Permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that the Permittee documents in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [63.1209(j)(2), (k)(3), (m)(2), (n)(5), and (o)(2)]
- (d) In order to demonstrate compliance with the destruction and removal efficiency standard of Condition D.22.6, the Permittee must specify operating parameters and limits to ensure that good operation of each hazardous waste firing system is maintained. [63.1209 (j)(4)]
- (e) In order to demonstrate compliance with the dioxin and furan, semivolatile metals and low volatile metals standards of Condition D.22.5(a), (c) and (d), and for combustors equipped with fabric filters, the Permittee must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. The Permittee must establish the hourly rolling average limit as the average of the test run averages. [63.1209(k)(1) and (n)(1)]
- (f) In order to demonstrate compliance with the particulate matter and semivolatile and low volatile standards of Condition D.22.5(c), (d) and (g), the Permittee must install, calibrate, operate, and maintain a monitoring device equipped with a recorder to measure the values for each operating parameter selected in accordance with the requirements of paragraph §63.1209(m)(1)(iv)(A)(1) of this section. The Permittee must

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install, calibrate, and maintain the monitoring equipment in accordance with the equipment manufacturer's specifications. The recorder must record the detector responses at least every 60 seconds. [63.1209 (m)(1)(iv)(4)(B) and (n)(3)]

- (g) In order to demonstrate compliance with the particulate matter standard of Condition D.22.5(g), the Permittee must establish a maximum ash feedrate limit as the average of the test run averages. [63.1209(m)(3)]
- (h) In order to demonstrate compliance with the hydrochloric acid and chlorine gas standard of Condition D.22.5(f) for combustors equipped with dry scrubbers, the Permittee must establish the following operating parameter limits:
 - (1) *Minimum sorbent feedrate*. The Permittee must establish a limit on minimum sorbent feedrate on an hourly rolling average as the average of the test run averages.
 - (2) Minimum carrier fluid flowrate or nozzle pressure drop. The Permittee must establish a limit on minimum carrier fluid (gas or liquid) flowrate or nozzle pressure drop based on manufacturer's specifications.
 - (3) Sorbent specifications. The Permittee must specify and use the brand (i.e., manufacturer) and type of sorbent used during the comprehensive performance test until a subsequent comprehensive performance test is conducted, unless the Permittee documents in the site-specific performance test plan that affect adsorption and establish limits on those parameters based on the sorbent used in the performance test. [63.1209(o)(4)]
- (i) In order to demonstrate compliance with the D.22.9(a)(2), the Permittee must monitor the pressure instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not maintained at any time.
- (j) The Permittee must use CMS (e.g., thermocouples, pressure transducers, flow meters) to document compliance with the applicable operating parameter limits under this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.22.16 Visible Emissions Notations

- (a) Visible emission notations of the MPTS baghouse stack exhaust and the generator stack shall be performed once per shift during normal daylight operations when the MPTS is in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take

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response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19][40 CFR 263.1211]

D.22.17 Record Keeping Requirements

- (a) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (b) To document compliance with Condition D.22.1, the Permittee shall maintain records of the hours of operation of the MPTS and the fuel usage by the generator.
- (c) To document compliance with the NESHAP, the Permittee shall maintain all records required by 40 CFR 63.1210 and 40 CFR 63.1211, including, but not limited to, the following:
 - (1) All information (including reports and notifications) required by this rule recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) All records as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) Documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) Records of applicability determination, including supporting analyses.
 - (3) All records of CEMS data required by 40 CFR 63.10(c).

D.22.18 Reporting Requirements

- (a) The Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi). If the total downtime for any CEMS or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.
- (b) To document compliance with the NESHAP 40 CFR 63, Subpart EEE, the Permittee shall report the information required by 40 CFR 63, Subpart EEE including, but not limited to the following:
 - (1) Compliance progress reports as required by 40 CFR 63.1211(b) and 40 CFR 63.10(d)(4).
 - (2) As required by 40 CFR 63.10(d)(2) and 40 CFR 63.1207(j) the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted

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simultaneously with the excess emissions and continuous monitoring system performance reports.

- (4) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within two (2) working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within seven (7) working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (5) Pursuant to 40 CFR 63.1206(c)(3)(vi), the Permittee shall report excessive exceedances.
- (6) Pursuant to 40 CFR 63.1206(c)(4)(iv), the Permittee shall report emergency safety vent openings.
- (c) In addition to being submitted to the address listed in Section C General Reporting Requirements, all reports submitted pursuant to 40 CFR 60, Subpart A, or 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

A "responsible official" as defined by 326 IAC 2-7-1(34), shall certify the reports.

D.22.19 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.22.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.23

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (t) One (1) flare manufacturing process located in Buildings 2504 and 145, with a maximum manufacturing capacity of 180 pounds of magnesium teflon viton (MTV) compound per day.
- (u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.23.1 Volatile Organic Compounds [326 IAC 8-1-6] [326 IAC 2-2][40 CFR 52.21]

(a) Emissions of VOCs from the flare manufacturing process located in Buildings 2504 and 145 shall be limited to less than 25 tons per consecutive twelve (12) month period with compliance determined at the end of each month. Monthly VOC emissions shall be calculated using the following equation:

VOC emissions (tons/month) = VOC used (tons/month) + acetone used (tons/month) - waste solvent generated (tons/month)

Compliance with this limit makes 326 IAC 8-1-6 (New Facilities) not applicable. Compliance with this limit also makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

(b) The VOC emissions from the flare manufacturing process in Building 198 shall be less than thirteen and six-tenths (13.6) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly VOC emissions shall be calculated using the following equation:

VOC Emissions (ton/month) = VOC Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

This limit is structured such that when including the VOC emissions the flare manufacturing process in Buildings 2504 and 145, the MPTS, and the CDC, all new units constructed in 2002, the total VOC emissions from the modifications are less than forty (40) tons per year. Compliance with this limit renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 5.21 not applicable to this modification. Compliance with this limit also renders the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable.

D.23.2 Hazardous Air Pollutants [326 IAC 2-4.1][40 CFR 63]

(a) Emissions of any individual HAP from the flare manufacturing process in Buildings 2504 and 145 shall be limited to less than 10 tons per consecutive twelve (12) month period with compliance determined at the end of each month. Emissions of any combination HAPs from the flare manufacturing process in Buildings 2504 and 145 shall be limited to less than 25 tons per consecutive twelve (12) month period with compliance determined at the end of each month. Monthly HAP emissions shall be calculated using the following equation:

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hexane emissions (tons/month) =

HAP used (tons/month) + acetone used (tons/month) - waste solvent generated

(tons/month)

Compliance with this limit makes 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) and 40 CFR 63 not applicable.

(b) The emissions of a single HAP from the flare manufacturing process in Building 198 shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The emissions of any combination of HAPs from the flare manufacturing process in Building 198 shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly HAP emissions shall be calculated using the following equation:

HAP Emissions (ton/month) = HAP Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

Compliance with these limits renders the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) and 40 CFR 63 not applicable to this modification.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.23.3 Record Keeping Requirements

- (a) To document compliance with Conditions D.23.1 and D.23.2 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC and HAP emission limits established in Conditions D.23.1 and D.23.2.
 - (1) The amount of VOC, HAP, and acetone used by each flare manufacturing process. Records shall include purchase orders and invoices necessary to verify the amount used.
 - (2) A log of the dates of VOC, HAP, and acetone usage by each flare manufacturing process;
 - (3) The amount of waste solvent generated by each manufacturing process. Records shall include hazardous waste manifests necessary to verify the amount generated.
 - (4) A log of the dates of hazardous waste generation.
 - (5) The weight of HAPs and VOCs emitted for each manufacturing process for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.23.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.23.1 and D.23.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

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Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY Compliance Branch**

PART 70 OPERATING PERMIT CERTIFICATION

Naval Surface Warfare Center, Crane Division Source Name: 300 Highway 361, Crane, Indiana 47522 Source Address:

Part 70 Permit No.: T101-7341-00005
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
9 Annual Compliance Certification Letter
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

Crane, Indiana

Permit Reviewer: Kimberly Paurazas

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Naval Surface Warfare Center, Crane Division Source Address: 300 Highway 361, Crane, Indiana 47522

Mailing Address: Code 09510 Building 3260, 300 Highway 361, Crane, IN 47522

Part 70 Permit No.: T101-7341-00005

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

9 1. This is an emergency as defined in 326 IAC 2-7-1(12)

The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A
Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

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Crane, Indiana

Permit Reviewer: Kimberly Paurazas

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:
Form Completed by: Title / Position: Date: Phone:

A certification is not required for this report.

Date:

Permit Reviewer: Kimberly Paurazas

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC Page 128 of 140 101-7341-00005

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

PART 70 OPERATING PERMIT NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Naval Surface Warfare Center, Crane Division Source Address: 300 Highway 361, Crane, Indiana 47522 Code 09510 Building 3260, 300 Highway 361, Crane, IN 47522 Mailing Address: Part 70 Permit No.: T101-7341-00005 This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. Report period Beginning: Ending: ___ Boiler Affected Alternate Fuel Days burning alternate fuel From To I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature: Printed Name: Title/Position:

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC Page 129 of 140 101-7341-00005

Crane, Indiana

Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

PART 70 OPERATING PERMIT CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

Source Name: Naval Surface Warfare Center, Crane Division Source Address: 300 Highway 361, Crane, Indiana 47522

Mailing Address: Code 09510 Building 3260, 300 Highway 361, Crane, IN 47522

Part 70 Permit No.: T101-7341-00005

Tank ID #: CRN-3234-13-17-U26, located in Building 3234

Type of process: Chromic acid anodizing

Monitoring Parameter: (provided by source upon final design

parameters)

Parameter Value: Total chromium

Limits: Less than 0.01 mg/dscm

This form is to be used to report compliance for the Chromium Electroplating NESHAP only. The frequency for completing this report may be altered by the IDEM, OAQ, Compliance Branch.

Companies classified as a major source: submit this report no later than 30 days after the end of the reporting period. complete this report no later than 30 days after the end of the reporting period.

and retain on site unless otherwise notified.

This form consists of 2 pages	Page 1 of 2
BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:	
TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:	

MAJOR AND AREA SOURCES: CHECK ONE

- NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
- THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY: IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES. APR JAN JUL OCT FEB MAY AUG NOV SEP MAR JUN DEC HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY: LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK. JAN APR JUL OCT AUG NOV **FEB** MAY SEP MAR JUN DEC

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

Crane, Indiana Permit Reviewer: Kimberly Paurazas

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CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

ATTACH A SEPARATE PAGE IF NEEDED	Page 2 o f 2
IF THE OPERATION AND MAINTENANCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS	OWED, PROVIDE AN TAKEN FOR THAT EVENT:
DESCRIBE ANY CHANGES IN TANKS, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE REPORT:	E THE LAST STATUS
ADDITIONAL COMMENTS:	
ALL SOURCES: CHECK ONE	
I CERTIFY THAT THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOW! THE OPERATION AND MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION CO! ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.	
THE WORK PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCO OPERATION AND MAINTENANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATT.	
Submitted by:	
Title/Position:	
Signature:	
Date:	

Attach a signed certification to complete this report.

Phone:_

Second Minor Permit Modification: 101-16761-00005

Modified by: ERG/KC

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Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY Compliance Branch**

	Pai	rt 70 Quarterly	Report	
Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	urce Address: 300 Highway 361, Crane, Indiana 47522 code 09510 Building 3260, 300 Highway 361, Crane, IN 47522 rt 70 Permit No.: T101-7341-00005 cility: (a) CRN-2728-01-12-N42, located in Building 2728; and (b) CRN-2728-02-12-N42, located in Building 2728; and (c) CRN-2728-03-12-N42, located in Building 2728, vOC limits			
		YEAR:		
Month	Tons of VOCs	Tons of VOCs	Tons of VOCs	Tons of VOCs
	Paint Booths			Total
Month 1				
Month 2				
Month 3				
Title	Deviation/s occ Deviation has l nitted by: / Position: ature:	ccurred in this quarte curred in this quarter. been reported on:		

Modified by: ERG/KC

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Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Second Minor Permit Modification: 101-16761-00005

Part 70 Quarterly Report

Source Name:	Naval Surface Warfare Center, Crane Division
Source Address:	300 Highway 361, Crane, Indiana 47522

Mailing Address: Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522

Source Modification No.:101-14493-00005

Facility: Contained Detonation Chamber Parameter: Net Explosive Weight (NEW)

Limit: 1700 tons per consecutive twelve (12) month period

YEAR:	

	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9	No deviation occurred in this quarter.	
9	Deviation/s occurred in this quarter. Deviation has been reported on:	
Submitt Title / P Signatu Date: Phone:	re:	

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

Permit Reviewer: Kimberly Paurazas

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Part 70 Quarterly Report

Source Name: Naval Surface Warfare Center, Crane Division Source Address: 300 Highway 361, Crane, Indiana 47522

Mailing Address: Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522

Source Modification No.: 101-14772-00005

Facility: Mobile Plasma Treatment System

Parameter: Hours

Limit: 1800 hours per consecutive twelve (12) month period

YEAR:

	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9	No deviation occurred in this quarter.
9	Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted Title / Pos Signature: Date: Phone:	ition:

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

Page 134 of 140 101-7341-00005

Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY Compliance Branch**

Part 70 Quarterly Report

Naval Surface Warfare Center, Crane Division Source Name:

Source Address: 300 Highway 361, Crane, Indiana 47522

Mailing Address: Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522

Source Modification No: 101-14772-00005

Facility: Generator for the Mobile Plasma Treatment System

Parameter: Gallons of diesel fuel

89,604 gallons per consecutive twelve (12) month period Limit:

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This month	Previous 11 months	12 months total
Month 1			
Month 2			
Month 3			

9	No deviation occurred in this quarter.
9	Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted Title / Posi Signature: Date: Phone:	

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC Page 135 of 140 101-7341-00005

Permit Reviewer: Kimberly Paurazas

Phone:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Part 70 Quarterly Report				
Source Address: 30 Mailing Address: Bu Source Modification No: 10 Facility: FI Parameter: To Limit: 25 Equation: Vo	aval Surface Warfare Center, Crane Division 00 Highway 361, Crane, Indiana 47522 uilding 3260, Code 09510, 300 Highway 361, Crane, IN 47522 01-15490-00005 are Manufacturing Process in Buildings 2405 and 145 ons of VOC 5 tons VOC emitted per consecutive (12) month period with ompliance determined at the end of each month OC emissions (tons/month) = VOC usage (tons/month) + acetone sage (tons/month) - waste solvent generated (tons/month) YEAR:			
	This month	Previous 11 months	12 months total	
Month	VOC	VOC	VOC	
Month 1	, 60	, , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Month 2				
Month 3				
9 Deviati Deviati Submitted by: Title / Position:		quarter. on:		
Date:				

Crane, Indiana Permit Reviewer: Kimberly Paurazas

Phone:

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC Page 136 of 140 101-7341-00005

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Part 70 Quarterly Report				
Source Address: 3: Mailing Address: B Source Modification No: 1: Facility: F Parameter: T Limit: 1: cd Equation: V	aval Surface Warfare Center, Crane Division 00 Highway 361, Crane, Indiana 47522 uilding 3260, Code 09510, 300 Highway 361, Crane, IN 47522 01-15490-00005 lare Manufacturing Process in Building 198 ons of VOC 3.6 tons VOC emitted per twelve (12) consecutive month period with ompliance determined at the end of each month OC Emissions (tons/month) = VOC Usage (tons/month) + Acetone sage (tons/month) - Waste Solvent Generated (tons/month)			
	YEAR:			
Month	This month	Previous 11 months	12 months total	
MONUT	VOC	VOC	VOC	
Month 1				
Month 2				
Month 3				
9 Deviat	viation occurred in this ion/s occurred in this ion has been reported	•		
Submitted by:				
Title / Position: _ Signature:				
Date:				

Crane, Indiana Permit Reviewer: Kimberly Paurazas Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC Page 137 of 140 101-7341-00005

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Source Modification No: Facility: Parameter: Limit: Equation:	30 Bu 10 Fla To 10 en de HA	Naval Surface Warfare Center, Crane Division 300 Highway 361, Crane, Indiana 47522 3uilding 3260, Code 09510, 300 Highway 361, Crane, IN 47522 01-15490-00005 Flare Manufacturing Process in Building 198 Tons of HAP 0 tons of any single HAP or 25 tons of any combination of HAPs emitted per twelve (12) consecutive month period with compliance letermined at the end of each month HAP Emissions (tons/month) = HAP Usage (tons/month) + Acetone Usage (tons/month) - Waste Solvent Generated (tons/month)		
		YEAR:		
Month		This month	Previous 11 months	12 months total
	'	HAP	HAP	HAP
Month 1				
Month 2				
Month 3				
9 [)eviatio	iation occurred in this on/s occurred in this on has been reported	quarter.	
Submitted b Title / Positio Signature: Date: Phone:				

Modified by: ERG/KC

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Crane, Indiana

Equation:

Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Second Minor Permit Modification: 101-16761-00005

Part 70 Quarterly Report

Source Name:	Naval Surface Warfare Center, Crane Division
Source Address:	300 Highway 361, Crane, Indiana 47522
Mailing Address:	Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522
Source Modification No:	101-15490-00005
Facility:	Flare Manufacturing Process
Parameter:	Tons of HAP
Limit:	10 tons of any HAP or 25 tons of any combination of HAPs emitted per
	consecutive twelve (12) month period

YEAR:___

HAP emissions (tons/month) = hexane usage (tons/month) + acetone usage

(tons/month) - waste solvent generated (tons/month)

 Month
 This month
 Previous 11 months
 12 months total

 HAP
 HAP
 HAP

 Month 1
 Month 2
 Month 3

9	No deviation occurred in this quarter.
9	Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted	bv:
Title / Pos	•
Signature	
Date:	
Phone:	

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC Page 139 of 140 101-7341-00005

Crane, Indiana

Permit Reviewer: Kimberly Paurazas

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Source Address: Mailing Address:		
Part 70 Permit No.:	T101-7341-00005	
Months: to	Year: _	
		Page 1 of 2
report shall be submitted the date(s) of each deviation must be reported. Deviation reported according to the included in this report. A please specify in the box	d quarterly based on a cale ation, the probable cause outions that are required to be schedule stated in the applicational pages may be a marked "No deviations or the cale at	et all the requirements stated in this permit. This endar year. Any deviation from the requirements, of the deviation, and the response steps taken be reported by an applicable requirement shall be opplicable requirement and do not need to be ttached if necessary. If no deviations occurred, ccurred this reporting period".
' NO DEVIATIONS OC	CURRED THIS REPORT	ING PERIOD.
		THIS REPORTING PERIOD
Permit Requirement (s	pecify permit condition #)	
Date of Deviation:		Duration of Deviation:
Number of Deviations:	:	
Probable Cause of Dev		
Response Steps Taker	1:	
Permit Requirement (s	pecify permit condition #)	
Date of Deviation:		Duration of Deviation:
Number of Deviations:		
Probable Cause of Dev	/iation:	
Response Steps Taker	1:	

Second Minor Permit Modification: 101-16761-00005 Modified by: ERG/KC

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Permit Reviewer: Kimberly Paurazas

Page 2 of 2

Permit Requirement (specify permit condition #)			
Date of Deviation:	Duration of Deviation:		
Number of Deviations:			
Probable Cause of Deviation:			
Response Steps Taken:			
Permit Requirement (specify permit condition #)			
Date of Deviation:	Duration of Deviation:		
Number of Deviations:			
Probable Cause of Deviation:			
Response Steps Taken:			
Permit Requirement (specify permit condition #)			
Date of Deviation:	Duration of Deviation:		
Number of Deviations:			
Probable Cause of Deviation:			
Response Steps Taken:			
Form Completed By: Title/Position: Date: Phone:			



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Minor Permit Modification

Source Background and Description

Source Name: Naval Surface Warfare Center - Crane Division

Source Location: 300 Highway 36, Crane, Indiana 47522

County: Martin
SIC Code: 9711, 3483
Operation Permit No.: T101-7341-00005
Operation Permit Issuance Date: May 15, 2001

Minor Permit Modification No.: MPM101-16761-00005

Permit Reviewer: ERG/KC

On February 5, 2003, the Office of Air Quality (OAQ) had a notice published in the Shoals News in Shoals, Indiana, stating that Naval Surface Warfare Center - Crane Division had applied for a Part 70 Minor Permit Modification to construct a new flare manufacturing process in Building 198. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 10, 2003, Naval Surface Warfare Center - Crane Division submitted comments on the proposed Part 70 Permit. The summary of the comments is as follows. Bolded language has been added, while text with a line through it has been deleted.

Comment 1:

The source noted a typo. The VOC Quarterly Report form lists the Flare Manufacturing Process in Buildings 2405 and 145. It should be listed as Buildings 2504 and 145.

Crane. Indiana

Permit Reviewer: ERG/KC

Page 2 of 3 MPM: 101-16761-00005

Response to Comment 1:

The typo was corrected as follows:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Part 70 Quarterly Report

Source Name: Naval Surface Warfare Center, Crane Division Source Address: 300 Highway 361, Crane, Indiana 47522

Mailing Address: Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522

Source Modification No: 101-15490-00005

Facility: Flare Manufacturing Process in Buildings 2405 2504 and 145

Parameter: Tons of VOC

Limit: 25 tons VOC emitted per consecutive (12) month period with

compliance determined at the end of each month

Equation: VOC emissions (tons/month) = VOC usage (tons/month) + acetone

usage (tons/month) - waste solvent generated (tons/month)

Comment 2:

The source noted that the HAP Quarterly Report for one of the flare manufacturing operations does not list what building the process is located in. The source would like this oversight corrected.

Response to Comment 2:

The HAP Quarterly Report form for the flare manufacturing process in building 198 is already listed. Therefore, the second HAP quarterly Report form is for the flare manufacturing process in buildings 2504 and 145. This was noted on the report form.

Also, the report from does not contain the correct equation to match Condition D.23.2. Therefore, the equation was corrected to match the corresponding condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

Part 70 Quarterly Report

Source Name: Naval Surface Warfare Center, Crane Division Source Address: 300 Highway 361, Crane, Indiana 47522

Mailing Address: Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522

Source Modification No: 101-15490-00005

Facility: Flare Manufacturing Process in Buildings 2504 and 145

Parameter: Tons of HAP

Naval Surface Warfare Center - Crane Page 3 of 3 Crane, Indiana MPM: 101-16761-00005

Permit Reviewer: ERG/KC

Limit: 10 tons of any HAP or 25 tons of any combination of HAPs emitted per

consecutive twelve (12) month period

Equation: HAP emissions (tons/month) = hexane HAP usage (tons/month) +

acetone usage (tons/month) - waste solvent generated (tons/month)

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. The listed affected pages on the permit coversheet was corrected as follows:

Second Minor Permit Modification: 101-16761-00005	Affected Pages: 20, 123-124, 135-136, 137
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification and a Part 70 Minor Permit Modification

Source Background and Description

Source Name: Naval Surface Warfare Center - Crane Division

Source Location: 300 Highway 36, Crane, Indiana 47522

County: Martin SIC Code: 9711, 3483

Operation Permit No.: T101-7341-00005 Operation Permit Issuance Date: May 15, 2001

Minor Source Modification No.: MSM101-16288-00005
Minor Permit Modification No.: MPM101-16761-00005

Permit Reviewer: ERG/KC

The Office of Air Quality (OAQ) has reviewed a modification application from Naval Surface Warfare Center - Crane Division relating to the construction and operation of the following emission units and pollution control devices:

(u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

History

On May 15, 2001, Naval Surface Warfare Center - Crane Division was issued a Part 70 permit, T101-7341-00005. On October 31, 2002, IDEM, OAQ received an application to construct and operate a flare manufacturing process in Building 198.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Weighing Bay 123 (198-05)	26	4	Unknown	Unknown
2	Weighing Bay 123 (198-04)	26	4	Unknown	Unknown
3	Weighing Bay 122 (198-01)	26	4	Unknown	Unknown
4	Weighing Bay 122 (198-02)	26	4	Unknown	Unknown
5	Drying Oven A	15	0.33	750	Unknown
6	Drying Oven B	15	0.33	750	Unknown
7	Drying Oven C	15	0.33	750	Unknown

Crane. Indiana

MSM: 101-16288-00005 Permit Reviewer: ERG/KC MPM: 101-16761-00005

Page 2 of 13

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
8	Drying Oven D	15	0.33	750	Unknown
9	Mixing, Bay 126, Cell 106	25	1	Unknown	Unknown
10	Mixing, Bay 122, Cell 122	25	1	Unknown	Unknown
11	Air Drying Exhaust, Bay 123, Cell 105	25	2	Unknown	Unknown

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 31, 2002.

Emission Calculations

See page 1 of Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls and waste disposal. Control equipment and solvent recovery is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO ₂	0
VOC	60.74
СО	0
NO _x	0

HAP's	Potential To Emit (tons/year)
Hexane	60.74
TOTAL	60.74

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(5)(A) because the potential to emit a HAP solvent is limited to less than ten (10) tons per year. Based on pilot-scale testing, this process's potential to emit is less than ten (10) tons per year with solvent recovery and disposal operating correctly. Record keeping is required to ensure that this limit is not exceeded. This justification is based on using hexane, which is both a HAP and a VOC, as the solvent. Permit conditions have been written so that a non-HAP VOC solvent could be substituted. For a non-HAP VOC solvent, the input limit would be thirteen and six-tenths (13.6) tons per year and the

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modification would be subject to 326 IAC 2-7-10.5(d)(4)(B)(iii). The permit modification for approval to operate is being performed pursuant to 326 IAC 2-7-12(b).

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County Attainment Status

The source is located in Martin County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO _x	Attainment
Ozone	Attainment
СО	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Martin County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Martin County has been classified as attainment or unclassifiable for all criteria pollutants and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) **Fugitive Emissions** Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Greater than 250
PM-10	Greater than 250
SO ₂	Greater than 100, Less than 250
VOC	Greater than 250
СО	Greater than 250
NOx	Greater than 250

- This existing source is a major stationary source because an attainment regulated (a) pollutant is emitted at a rate of two hundred fifty (250) tons per year or more, and it is not one (1) of the twenty-eight (28) listed source categories.
- (b) These emissions are based on the Technical Support Document for T101-7341-00005, issued May 15, 2001.

Potential to Emit of Modification After Issuance

For comparison with PSD significance levels, emissions for this modification have been combined with those of three (3) other new additions at the source: the Contained Detonation Chamber (CDC) (Significant Source Modification 101-14789-00005, issued January 3, 2002); the Mobile Plasma Treatment System (MPTS) (Significant Source Modification 101-14772-00005, issued June 7, 2002); and the Flare Manufacturing Process in Buildings 2504 and 145 (Minor Source Modification 101-15490-00005, issued June 26, 2002). The emissions from these modifications are being evaluated in combination because these units are being added within a brief period of time.

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The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

		Potential to Emit (tons/year)					
Process/facility	PM	PM PM-10 SO ₂ VOC CO NO _X HAPs					
Flare Manufacturing Process - Building 198	0	0	0	Less than 13.6	0	0	Less than 10
Flare Manufacturing Process - Buildings 2504 and 145	0	0	0	Less than 25	0	0	Less than 10
MPTS	0.60	0.60	19.75	1.17	2.91	25.41	Less than 0.1
CDC	0.51	0.51	0.08	0.18	96.56	14.45	Less than 0.1
Total	1.11	1.11	19.83	Less than 40	99.47	39.86	Less than 20.2
PSD Significant Thresholds	25	25	40	40	100	40	

Note: For 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) and 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) applicability determinations, VOC and HAP emissions from the Flare Manufacturing Process - Building 198 are viewed independently from VOC and HAP emissions from the Flare Manufacturing Process - Buildings 2504 and 145, MPTS, and CDC. The emissions are viewed independently because 326 IAC 2-4.1 and 326 IAC 8-1-6 applies to individual facilities or operations. The flare manufacturing operations in Buildings 198 operate independently from the flare manufacturing operations in Buildings 2504 and 145.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.
- (c) This modification is not subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring. In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 or Part 71 permit must meet three criteria for a given pollutant: 1) the unit is subject to an applicable emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and 3) the unit has the potential to emit, of the applicable regulated air pollutant, equal or greater than one hundred percent (100%)

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of the amount required for a source to be classified as a major source. The potential to emit of this modification when using solvent recovery and wasted disposal does not exceed one hundred percent (100%) of the amount required for a source to be classified as a major source. Therefore this modification is not subject to CAM.

(d) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this modification because (1) the modification is limiting emissions of a single HAP to less than ten (10) tons per year and emissions of any combination of HAPs are less than twenty-five (25) tons per year and 2) the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

The VOC emissions from the flare manufacturing process in Building 198 shall be less than thirteen and six-tenths (13.6) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly VOC emissions shall be calculated using the following equation:

VOC Emissions (ton/month) = VOC Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

This limit is structured such that when including the VOC emissions the flare manufacturing process in Buildings 2504 and 145, the MPTS, and the CDC, all new units constructed in 2002, the total VOC emissions from the modifications are less than forty (40) tons per year. Compliance with this limit renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to this modification.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

The emissions of a single HAP from the flare manufacturing process in Building 198 shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The emissions of any combination of HAPs from the flare manufacturing process in Building 198 shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly HAP emissions shall be calculated using the following equation:

HAP Emissions (ton/month) = HAP Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

Compliance with these limits renders the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable to this modification.

The HAP emissions from the flare manufacturing process in Building 198 are viewed independently from the HAP emissions from the flare manufacturing process in Buildings 2504 and 145, MPTS, and CDC when determining 326 IAC 2-4.1 applicability. For this reason, HAP emissions from Building 198 and HAP emissions from Buildings 2504 and 145 can each be limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for any combination of HAPs and still not trigger the requirements of 326 IAC 2-4.1. The emissions from the processes are viewed independently because 326 IAC 2-4.1 applies to an individual facility or process. The flare manufacturing operation in Building 198 and the flare manufacturing operations in Buildings 2504 and 145 are completely independent processes. Therefore their emissions are not summed to determine 326 IAC 2-4.1 applicability. If 326 IAC 2-4.1 applied to these processes, it would apply to each one individually.

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On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued, these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the requirements from the previous version of 326 IAC 6-3 (Process Operations), which have been approved into the SIP, will remain applicable requirements until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.

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The flare manufacturing process does not have the potential to emit particulate. Therefore neither the previous version of 326 IAC 6-3 (Process Operations) nor the revised version of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) apply to this modification.

326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

The VOC emissions from the flare manufacturing process in Building 198 shall be less than thirteen and six-tenths (13.6) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly VOC emissions shall be calculated using the following equation:

VOC Emissions (ton/month) = VOC Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

Compliance with this limitation renders the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable to this modification.

The VOC emissions from the flare manufacturing process in Building 198 are viewed independently from the VOC emissions from the flare manufacturing process in Buildings 2504 and 145, MPTS, and CDC when determining 326 IAC 8-1-6 applicability. For this reason, VOC emissions from Building 198 and HAP emissions from Buildings 2504 and 145 can each be limited to less than twenty-five (25) tons per year and still not trigger the requirements of 326 IAC 8-1-6. The emissions from the processes are viewed independently because 326 IAC 8-1-6 applies to an individual facility or process. The flare manufacturing operation in Building 198 and the flare manufacturing operations in Buildings 2504 and 145 are completely independent processes. Therefore their emissions are not summed to determine 326 IAC 8-1-6 applicability. If 326 IAC 8-1-6 applied to these processes, it would apply to each one individually.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Proposed Changes

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The following changes are proposed to T101-7341-00005, issued May 15, 2001, as a result of this Significant Permit Modification. Text in bold was added and text with a line through it was deleted. The Table of Contents was updated on an as needed basis.

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A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

SECTION D.23 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (t) One (1) flare manufacturing process located in Buildings 2504 and 145, with a maximum manufacturing capacity of 180 pounds of magnesium teflon viton (MTV) compound per day.
- (u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.23.1 Volatile Organic Compounds [326 IAC 8-1-6] [326 IAC 2-2][40 CFR 52.21]

(a) Emissions of VOCs from the flare manufacturing process located in Buildings 2504 and 145 shall be limited to less than 25 tons per consecutive twelve (12) month period with compliance determined at the end of each month. Monthly VOC emissions shall be calculated using the following equation:

Compliance with this limit makes 326 IAC 8-1-6 (New Facilities) not applicable. Compliance with this limit also makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

(b) The VOC emissions from the flare manufacturing process in Building 198 shall be less than thirteen and six-tenths (13.6) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly VOC emissions shall be calculated using the following equation:

VOC Emissions (ton/month) = VOC Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

This limit is structured such that when including the VOC emissions the flare manufacturing process in Buildings 2504 and 145, the MPTS, and the CDC, all new

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units constructed in 2002, the total VOC emissions from the modifications are less than forty (40) tons per year. Compliance with this limit renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 5.21 not applicable to this modification. Compliance with this limit also renders the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable.

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D.23.2 Hazardous Air Pollutants [326 IAC 2-4.1][40 CFR 63]

(a) Emissions of any individual HAP from the flare manufacturing process in Buildings 2504 and 145 shall be limited to less than 10 tons per consecutive twelve (12) month period with compliance determined at the end of each month. Emissions of any combination HAPs from the flare manufacturing process in Buildings 2504 and 145 shall be limited to less than 25 tons per consecutive twelve (12) month period with compliance determined at the end of each month. Monthly HAP emissions shall be calculated using the following equation:

hexane HAP emissions (tons/month) = hexane HAP used (tons/month) + acetone used (tons/month) - waste solvent generated (tons/month)

Compliance with this limit makes 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) and 40 CFR 63 not applicable.

(b) The emissions of a single HAP from the flare manufacturing process in Building 198 shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The emissions of any combination of HAPs from the flare manufacturing process in Building 198 shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly HAP emissions shall be calculated using the following equation:

HAP Emissions (ton/month) = HAP Used (ton/month) + Acetone Used (ton/month) - Waste Solvent Generated (ton/month)

Compliance with these limits renders the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) and 40 CFR 63 not applicable to this modification.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.23.3 Record Keeping Requirements

- (a) To document compliance with Conditions D.23.1 and D.23.2 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC and HAP emission limits established in Conditions D.23.1 and D.23.2.
 - (1) The amount of hexane VOC, HAP, and acetone used by the each flare manufacturing process. Records shall include purchase orders and invoices necessary to verify the amount used.
 - (2) A log of the dates of hexane VOC, HAP, and acetone usage by each flare manufacturing process:

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(3) The amount of waste solvent generated by the each manufacturing process. Records shall include hazardous waste manifests necessary to verify the amount generated.

- (4) A log of the dates of hazardous waste generation.
- (5) The weight of HAPs and VOCs emitted **for each manufacturing process** for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Source Modification No: Facility: Parameter: Limit: Equation:	Naval Surface Warfare Center, Crane Division 300 Highway 361, Crane, Indiana 47522 Building 3260, Code 09510, 300 Highway 361, Crane, IN 47522 101-15490-00005 Flare Manufacturing Process in Buildings 2405 and 145 Tons of VOC 25 tons VOC emitted per consecutive (12) month period with compliance determined at the end of each month VOC emissions (tons/month) = hexane VOC usage (tons/month) + acetone usage (tons/month) - waste solvent generated (tons/month) YEAR:			
	This month	Previous 11 months	12 months total	
Month	VOC	VOC	VOC	
Month 1				
Month 2				
Month 3				
9 Deviati	iation occurred in this quotient on this quotien on this quotien has been reported on		-	
Submitted by: Title / Position: Signature: Date: Phone:				

Attach a signed certification to complete this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY Compliance Branch**

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Source Modification No: Facility: Parameter: Limit: Equation:	300 Highway 361, Cra Building 3260, Code (101-15490-00005 Flare Manufacturing (Tons of VOC 13.6 tons VOC emitte with compliance dete VOC Emissions (tons	re Center, Crane Division ane, Indiana 47522 09510, 300 Highway 361 Process in Building 198 d per twelve (12) consec ermined at the end of eac s/month) = VOC Usage (to Waste Solvent Generate	Crane, IN 47522 cutive month period ch month ons/month) + Acetone
Month	This month	Previous 11 months	12 months total
Month	voc	voc	voc
Month 1			
Month 2			
Month 3			
9 Devia		quarter.	

Attach a signed certification to complete this report.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY Compliance Branch**

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Source Modification No: Facility: Parameter: Limit: Equation:	300 Highway 361, Cra Building 3260, Code 101-15490-00005 Flare Manufacturing Tons of HAP 10 tons of any single emitted per twelve (1 determined at the end HAP Emissions (tons	e Manufacturing Process in Building 198			
	YEAR:				
	This month	Previous 11 months	12 months total		
Month	HAP	НАР	HAP		
Month 1					
Month 2					
Month 3					
9 Deviat i	riation occurred in this ion/s occurred in this ion has been reported	quarter.			
Submitted by: Title / Position Signature: Date: Phone:					

Attach a signed certification to complete this report.

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Conclusion

The construction of this proposed modification shall be subject to the conditions of the proposed Part 70 Minor Source Modification No. 101-16288-00005, and the operation of this proposed modification shall be subject to the conditions of the proposed Part 70 Minor Permit Modification No. 101-16761-00005.

Appendix A: Emissions Calculations App A, pag

Company Name: Naval Surface Warfare Ceneter - Crane Address City IN Zip: 300 Highway 36, Crane, Indiana 47522

Permit Number: MPM101-16761-00005

Unlimited PTE

Gross Hexane Usage = 20 (gal/batch) * 3 (batches/day) * 365 (days/yr) * 5.5 lb/gal / 2000 (lb/ton) = 60.23 ton/yr

PTE from Sample Batches

Gross Hexane Usage = 4 (gal/batch) * 12 (batches/yr) * 5.5 lb/gal / 2000 (lb/ton) = 0.13 ton/yr

PTE from Test Batches

Gross Hexane Usage = 20 (gal/batch) * 3 (batches/yr) * 5.5 lb/gal / 2000 (lb/ton) = 0.17 ton/yr

PTE from Ignition Composition

Gross Hexane Usage = 3 (gal/batch) * 26 (batches/yr) * 5.5 lb/gal / 2000 (lb/ton) = 0.21 ton/yr

Total Gross Hexane Usage = 60.74 ton/yr

PTE with Solvent Recovery

Magnesium Teflon Compound Production = 150 lb/day (3 batches at 50 lb/batch)

Hexane Lost During Drying = 150 (lb/day) * 365 (day/yr) / 2000 (lb/ton) * 0.141 (loss %) = 3.86 ton/yr

Hexane Lost During Mixing = Negligible (approximately 1 lb/day) = 0.18 ton/yr

Hexane Lost During Air Drying = Negligible (approximately 10 lb/day) = 1.83 ton/yr

Hexane Lost from Sample Batch = 4 (gal/batch) * 12 (batch/yr) * 5.5 (lb/gal) / 2000 (lb/ton) * 0.141 (loss %) = 0.02

Hexane Lost from Test Batch = 20 (gal/batch) * 3 (batch/yr) * 5.5 (lb/gal) / 2000 (lb/ton) * 0.141 (loss %) = 0.02

Hexane from Ingnition Composition = 3 (gal/batch) * 26 (batches/yr) * 5.5 lb/gal / 2000 (lb/ton) * 0.141 (loss %) = 0.03

ton/yr

ton/yr

ton/yr